Medical Life

Registered at the G.P.O., Sydney, for Transmission by Post as a Newspaper. Published Weekly.

THE

MEDICAL JOURNAL OF AUSTRALIA

(With which "The Australasian Medical Gazette," and "The Australian Medical Journal" are incorporated.)

The Journal of the Australian Branches of the British Medical Association

VOL. I.—8TH YEAR—NO. 7. SYDNEY: SATURDAY, FEBRUARY 12, 1921. PRICE 6D.

Surgical Instruments

We are pleased to announce that good general stocks of our Surgical Instruments have arrived and that regular supplies are now coming forward. Members of the Profession are cordially invited to visit our Show Rooms.

Allen & Hanburys (Australasia) Ltd.

Instrument Makers to H.M. Army and H.M. Navy

AUSTRALASIAN BRANCH:

B.M.A. Building : Elizabeth St., Sydney

LIBRARY *and* OFFICE Furniture

F1/155
Oak or Maple BUREAU
2 ft. 3 in. wide, 4 ft. 5 in. high. £9/10/-

F2/149
Roll-Top DESK, Oak or Maple, low type without pigeon holes, 50 in., £19/10/-

F1/147
Oak or Maple Open CASE, 2ft. 3 in. wide 4 ft. 4 in. high, £5/5/-

F2/01
TYPIST'S TABLE with Flap and Slide, 36 in. long.
Oak, £5/5/- Maple, £5/15/-

A large stock of naturally seasoned timbers, modern methods and machinery, and the most skilled work in the country are combined to produce the fine furniture so long associated with the name of Beard Watson

F2/145
WRITING TABLE in Oak or Maple, 4 ft. 6 in. £11/15/-

F2/113
Half Pedestal DESK in Oak or Maple, 42 in. £16/10/-

F1/157
Bureau BOOKCASE in Oak or Maple, 2 ft. 6 in. wide, 72 in. high, £11/15/-

F1/163
Cabinet BOOKCASE in Oak or Maple, 60 in. wide and 50 in. high, enclosed Wing Cupboards and centre Writing Fall. £18/10/-

BEARD WATSON & CO. LTD.

GEORGE STREET, SYDNEY

THE MEDICAL JOURNAL OF AUSTRALIA.

VOL. I.—8TH YEAR. SYDNEY: SATURDAY, FEBRUARY 12, 1921. No. 7.

THE SURGICAL PROBLEMS OF THE STOMACH AND DUODENUM.

By **H. B. Devine, M.S. (Melb.),**

Honorary Surgeon to In-Patients, St. Vincent's Hospital, Melbourne.

(Continued from Page 109.)

Technique.

These are very difficult, dangerous and extensive operations and require a great deal of dexterity, special apparatus and an anæsthetist with a knowledge of this particular type of stomach case. The margin of error is not great. That I have had practically no anxiety after these big operations and the patients have had very little shock I attribute to the special methods employed (Figure VIII.). The stomach was collapsed by emptying it of air and fluid with an air pump. This insured access, ease and a minimum of handling, as well as a dry stomach. No clamps were used; vessels were tied as they bled. Sutures do not always control the vessels when the clamps are taken off, especially in these large resections. The subsequent bleeding into the stomach and intestines, the extent of which is always uncertain, is a lively factor in causing shock. Apart from this, the small hæmatoma in the suture line is a great evil. It is most likely to become infected with the always present germ and this causes a "leak" in the suture line. Clamps

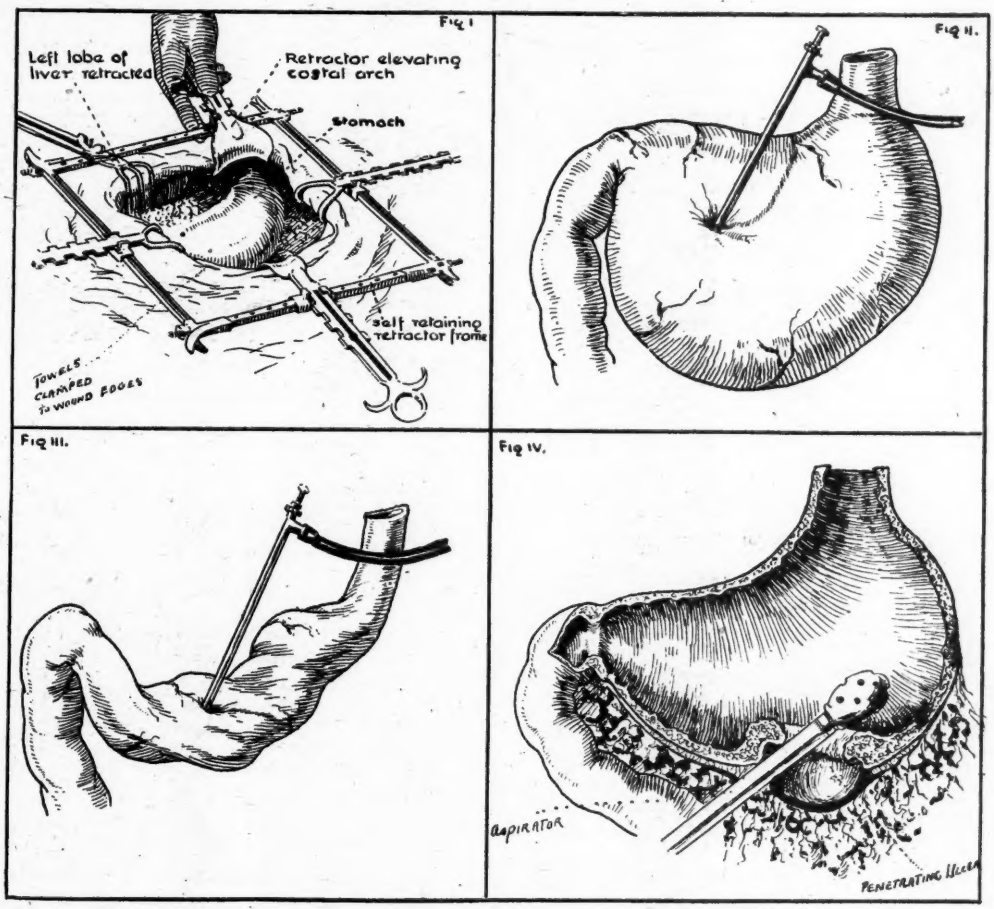

FIGURE VIII..

Technique:

Figure I.—Rachet adjustable four-bladed retractor, which clamps on a wound covering and enables the abdominal wall to be lifted from the viscera.

Figure II.—Trocar attached to air pump aspirating air and fluid from the stomach.

Figure III.—Collapsed and more manageable stomach.

Figure IV.—Deliberate perforation at the edge of a penetrating ulcer of the pancreas and stomach thoroughly dried with aspirator.

cut the mucous membrane which may not be caught by the suture and they bruise the tissues; devitalized tissue, denuded of its mucous membrane, is liable to form a jejunal ulcer. It is also not possible with clamps so to arrange the lumen of the stomach as to prevent subsequent deformity and loss of motility.

An antiseptic treatment to sutured edges was also practised. The stomach was always manipulated between large gauze screens.

Omental Transplantation.

In all these cases big large pedicled transplants of omentum, with pedicles well fixed down, were stitched as slender bolsters, scarves or screens over the suture lines. (See Figures IX. and X.).

This rather elaborate omental toilet prevented re-adhesions to the old ulcer site and fixation of stomach to the posterior and anterior abdominal parietes and to other organs—a very important precaution.

Out of the twenty-six very difficult cases in this series, sixteen were in old "dereliet" patients and, with the exception of the one mentioned who died five weeks after operation, all are quite well over a period of years; ordinary motility is demonstrable by X-ray examination.

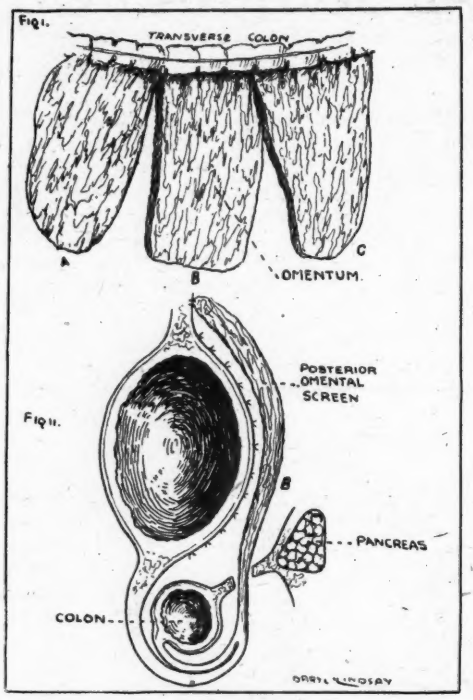

FIGURE IX..
Large omental pedicled transplant to act as screen between stomach and the bare area on pancreas of the base of the ulcer.
B is transplant.
A and C are united.

Problem No. 7: Duodenal Ulcer.

Will an ordinary gastro-enterostomy cure it? I think only in a proportion of cases. In twenty-six cases I have only done simple gastro-enterostomy four times on fully patent duodenums; of the patients, one died four years after from a profuse hæmorrhage.

In a case of Mr. Dunhill, with which I was asso-

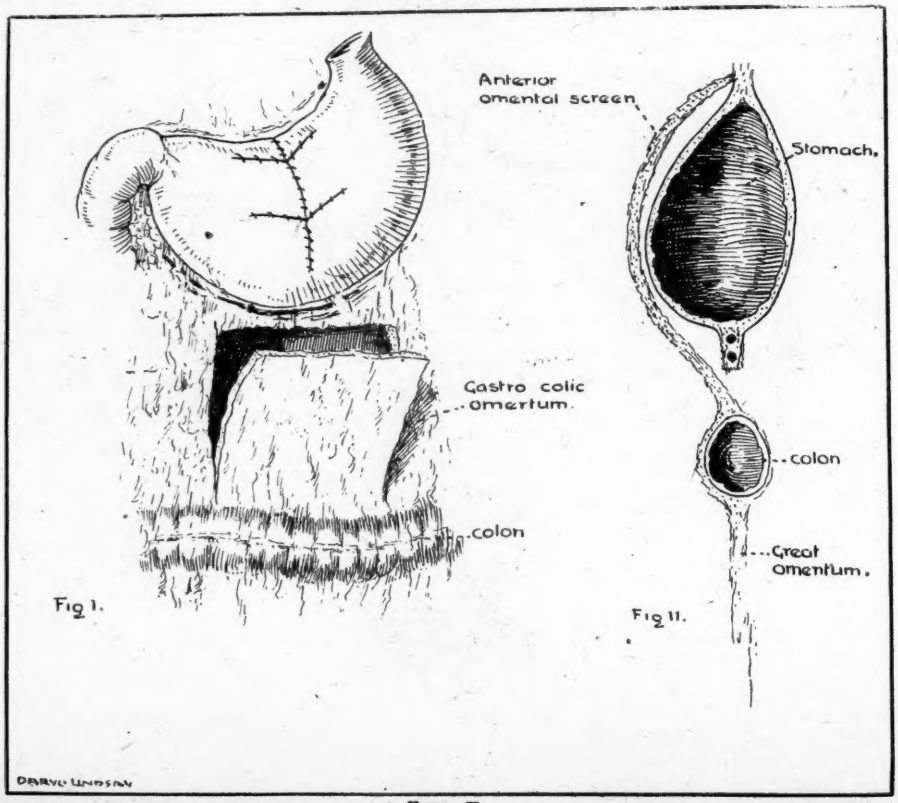

FIGURE X..
Screen to prevent adhesion of the anterior wall of the stomach to the anterior abdominal wall.

ciated, a gastro-enterostomy was done for persistent and alarming hæmorrhage. This patient did not get better until the pylorus was cut across and closed. It was a most instructive case.

In two other cases (not my own) there were florid duodenal ulcers in the presence of a functional stoma between the stomach and the intestine. In three cases in which the ulcer was associated with a high degree of stenosis and in which the conditions for gastro-enterostomy were ideal, a good result was attained. One of these patients, in whom the duodenum had practically closed from stenosis (he had the largest stomach I have ever seen), was examined five years later; to my surprise, the duodenum had become fully patent and very little went by the stoma.

Ulcers which bleed profusely, are, I think, a different type from those whose dominant symptom is

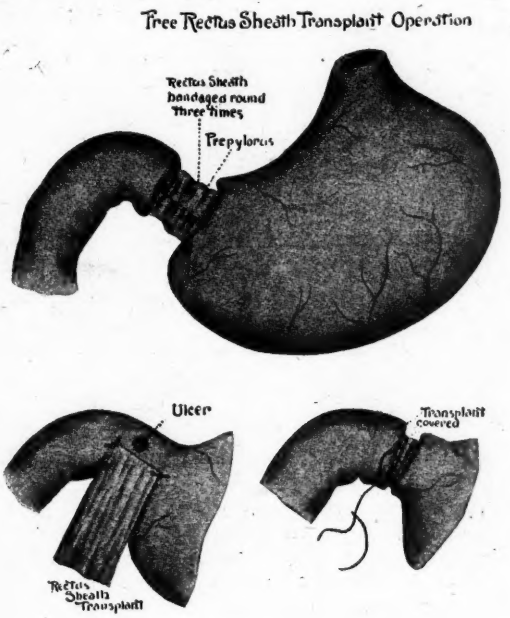

FIGURE XI.

"hunger pain." The former are most acute and sometimes give surprisingly little indication of their presence, profound melæna or perforation often being the first signs. They are, I think, similar to the acute ulcer of the stomach; these are the ulcers that continue to bleed after gastro-enterostomy. In three of these cases I bandaged firmly with three turns of a free fascial transplant cut from the rectus sheath, the ulcer bearing area of the duodenum. (See Figure XI.). This prevented hæmorrhage, made for the healing of the ulcer and brought about duodenal stenosis. From subsequent X-ray examinations I think such a graft functionates more or less for from two to three years. Surely by this time the ulcer must have healed beyond chance of recurrence.

In three patients resection of the duodenal ulcer was combined with gastro-enterostomy.

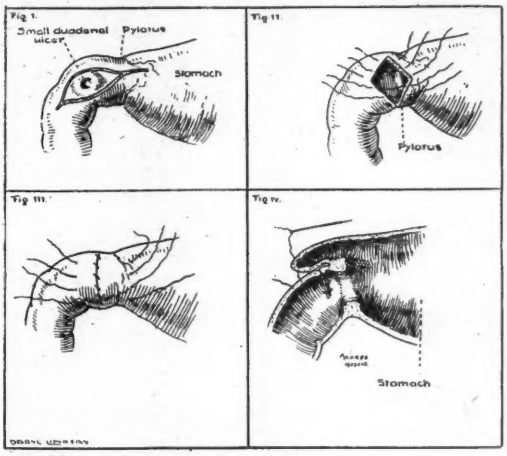

FIGURE XII..
Operation for Removal of Small Duodenal Ulcer or Scar.
Figure I.—Incision round the ulcer and through the pylorus.
Figure II.—Transverse suture.
Figure IV.—Anterior wall of the stomach drawn over.

In one the ulcer had ulcerated into gall bladder wall and had mimicked the symptoms of gall stones.

In another case, where the ulcer was small and on the anterior wall, close to the pylorus, it was cut out and no gastro-enterostomy was done, with a good result.

Figure XII. shows the method:

(*i.*) The ulcer was cut out by incision in the long axis of the bowel and the pylorus cut through.

(*ii.*) The cut edges were sutured transversely.

(*iii.*) The anterior wall of *pars pylorica* was pulled over the suture, partly invaginating the duodenum into the stomach.

Duodenal ulcer always occurs on that part of the duodenum which is associated with the jets of acid chyme. All evidence goes to show that gastro-enterostomy insures the healing of the ulcer and in time the tendency is for the chyme to resume its normal course. The stoma contracts from lack of function. We have then the same set of circumstances as before the ulcer was formed, except that the ulcer-bearing area now has a scar—a *locus minoris resistentiæ*. The duodenal physiology has broken down once. It is likely to do so again. For this reason I employ an operation which transfers for all time the chyme "traffic" to another area of mucous membrane. It is a transplantation of the pylorus and is as follows (Figure XIII.):

(1) The stomach is cut across 2.5 cm. from the pylorus.

(2) It is then implanted end to side into the jejunum, about 7.5 cm. from the duodenal-jejunal juncture.

(3) The ulcer may be (*a*) cut out, or (*b*), if in the posterior wall, left in the dead end.

The segment of stomach is purposely left, because:

(*i.*) it is easier and safer to close than the duodenum;

(*ii.*) The pyloric muscle is an additional closure safeguard;

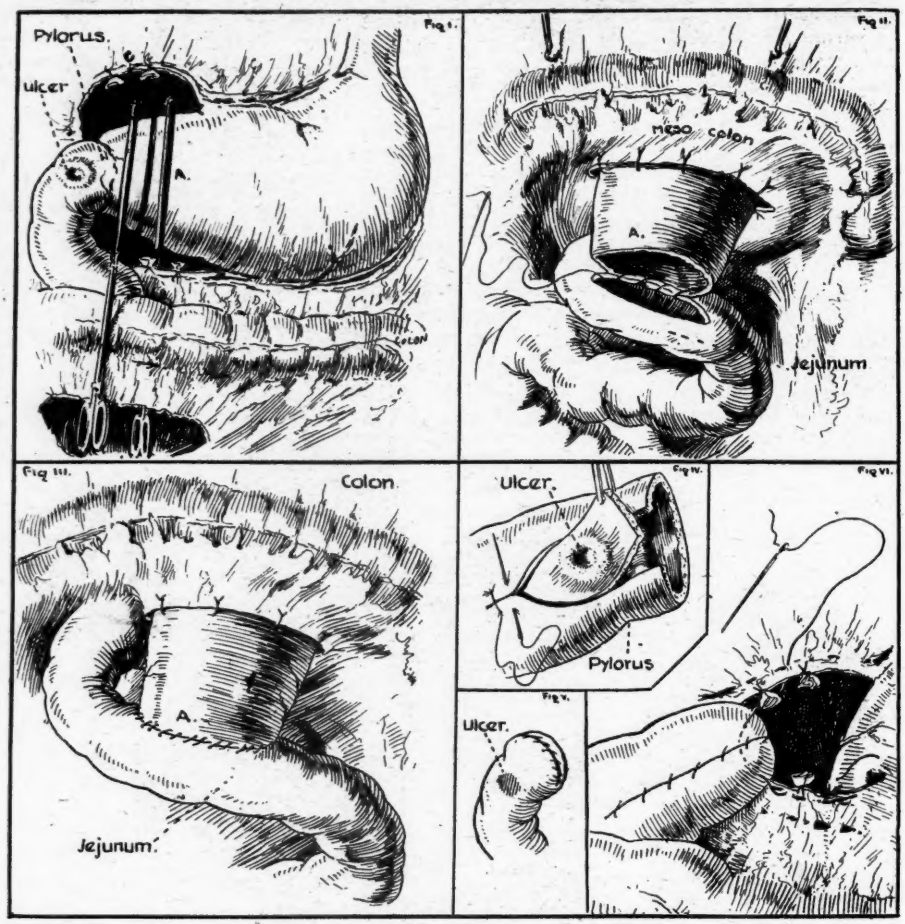

FIGURE XIII..

Figure I.—Section of stomach to get the proper sized stoma at "A."

Figure II. — Implantation of "A" into the upper part of the jejunum.

Figure III. — Position of the intestine in relation to the stomach.

Figure IV.—Resection of the ulcer if in the anterior wall.

Figure V.—Ulcer left in the "dead end" if in the posterior wall.

Figure VI. — Closure of space "C" by suture of the omentum over the duodenal suture line.

(*iii.*) it is necessary to have the artificial stoma much bigger than the natural pyloric opening.

The advantages are:

(1) The very favourable position of stoma in the most natural and most dependent position, where the peristaltic waves are deepest. These more powerful waves of the prepyloric part eject the food from the part with less deep and less powerful waves where the stoma is usually placed.

(2) The food remains a reasonable time in the stomach (about one to two hours), insuring some gastric digestion. This is partly because the stomach maintains its hook shape. (See skiagram, Figure XIVA and B.)

(3) There is no possibility of angles or kinks to give a "vicious circle."

(4) The stoma is placed high in the jejunum, near the duodenal alkaline secretion. This lessens the chance of jejunal ulcer.

(5) The whole of the function is thrown on the stoma and it is therefore unlikely to contract.

Naturally, this operation is of value only in duodenal ulcer and is especially designed for old and calloused, well established ulcer, where the duodenum "has failed" and is unlikely to recover completely.

It was performed on three dogs and the examination after death showed no evil effects. (Figure XVI.)

Eleven patients have been operated on by this method, the earliest three years ago. They gave no trouble after the operation; indeed, their immediate post-operative course was remarkably smooth. Up to the present they are all well.

PROBLEM No. 8: GASTRO-ENTEROSTOMY.

Successful Gastro-Enterostomy.

There is no doubt that in focussing our attention on the patients who have either not been cured or have been made worse by gastro-enterostomy, we are apt to forget the immense number of patients restored to health by its aid. The operation has been brought into disrepute because, in the past, its physiology has not been understood and because it has been done as a panacea for all stomach ills and, therefore, in cases for which it was not adapted. In the proper case and as an adjunct to other surgical procedure, it is highly successful.

Unsuccessful Gastro-Enterostomy.

Unsuccessful gastro-enterostomy may be due to:

(*i.*) Erroneous diagnosis of affection of the stomach in conditions caused by disease elsewhere, *e.g.*, tubercular disease of the intestine or gall-bladder, appendicitis or almost any disease in the abdomen. The disease still persists and is the cause of the failure, not the operation that has been performed.

(*ii.*) When the operation is performed for organic stomach disease, such as ulcers, remote from pylorus, for which it is not adapted.

(*iii.*) The technique of operation has been imperfect, resulting in (*a*) the formation of a coronal spur, (*b*) a jejunal kink, or (*c*) partial strangulation of the afferent loop and efferent loop in an imperfectly closed and placed gastro-colic omentum opening. The coronal spur is a most potent cause. I was able to produce this state of affairs in a dog by attaching the intestine to the stomach in a position half way between the "Moynihan" and "Mayo" methods. (See Figures XV. and XVI.)

FIGURE XIVA.
Skiagram of the stomach after operation for transplantation of the pylorus; the stomach retains its hook shape and empties almost normally.
I am indebted for this beautiful skiagram to Dr. Hewlett.

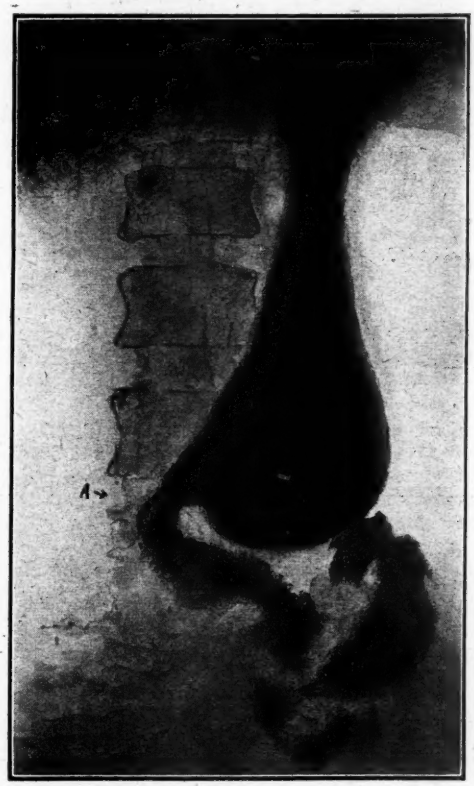

FIGURE XIVB.
This is an exact sketch of a skiagram taken by Dr. Hewlett of the appearance of the stomach after "transplantation of pylorus" method for duodenal ulcer.
A: Stoma in a natural position.

(*iv.*) A palliative gastro-enterostomy, done on the infiltrating and contracting form of malignant disease of the stomach, is likely to give rise to kinks and a "vicious circle." My experience of the value of this operation has been so unsatisfactory that I now prefer in most cancer cases to do a gastrectomy or to leave the case to Nature, except, perhaps, in chronic inoperable scirrhus tumours of the pylorus, with high-grade stenosis.

(*v.*) The operation is done for gastric and duodenal symptoms, in the absence of the usually demonstrable organic disease. This happens in two distinct types of patient: those with (*a*) atonic, dilated stomachs, and (*b*) those with duodenal ileus. In the for-

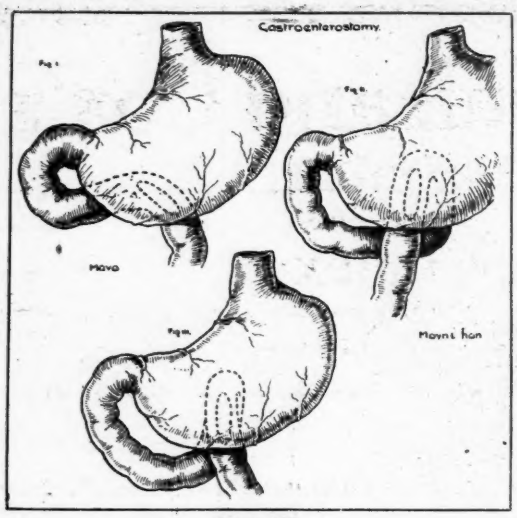

FIGURE XV..
Gastro-enterostomy with Coronal Spur.
Figure I.—Non-iso-peristaltic method.
Figure II.—Iso-peristaltic method.
Figure III.—Position of stoma which gives a coronal spur and a vicious circle.

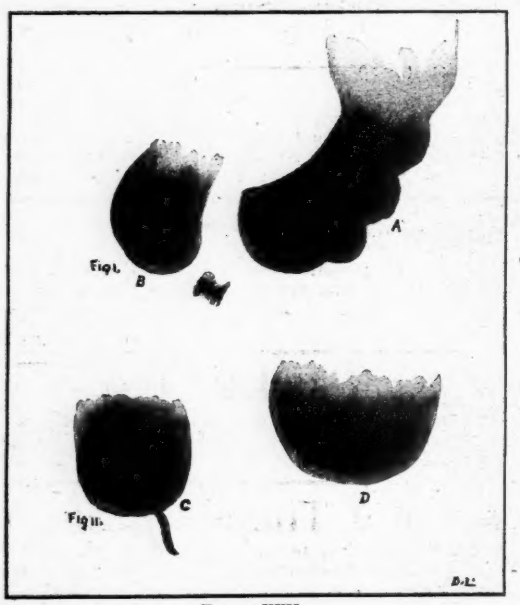

FIGURE XVII..
Sketch of a Pronounced Case of Duodenal Ileus.
A: Stomach.
B: Duodenum filled to the superior mesenteric artery and as large as a champagne glass.
C: Lower edge similar to the lower edge of the shadow of the œsophagus in cardiospasm.

mer the failures are due to absence of gastric tone, which is more essential to empty a stomach through a gastro-enterostomy stoma than through the pylorus. It is to the latter that I wish to direct special attention.

PROBLEM NO. 9: DUODENAL ILEUS.

For years I have noticed the following clinical syndrome: (1) A spare, tall, neurasthenic woman,

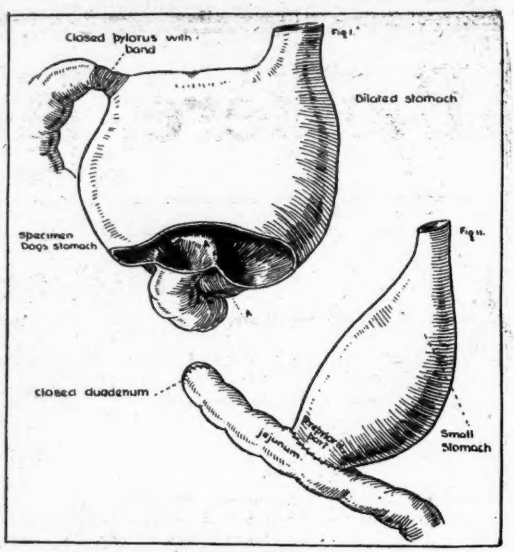

FIGURE XVI..
Figure I.—Coronal spur "A" and vicious circle produced experimentally in a dog.
Figure II.—Stomach of a dog in which the pylorus was transplanted as in Figure XIII..

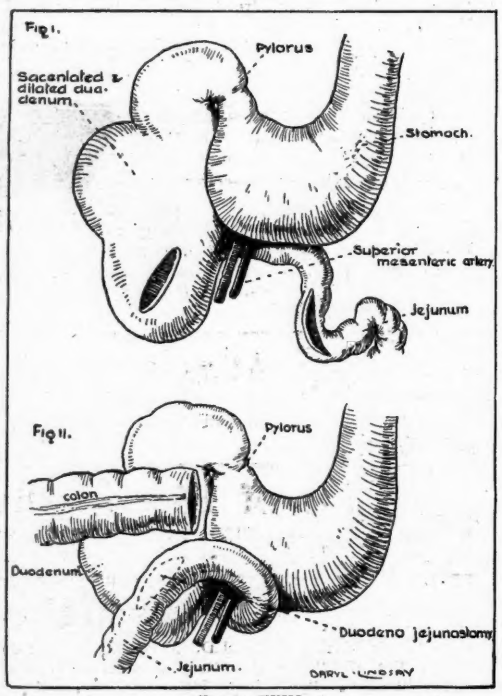

FIGURE XVIII..
Figure I.—Appearance of duodenal ileus at operation.
Figure II.—Duodeno-jejunostomy done in three of these cases.

with hypotonic abdominal and pelvic floor muscles; (2) a long history of illness, generally more severe after child-bearing began; (3) a feeling of discomfort and the presence of a lump in the epigastrium; (4) epigastric pain from two to four hours after food, with occasionally "hunger pain"; (5) relief

of this by vomiting (the vomit contains large quantities of bile); (6) a tender spot over the duodenum; (7) loss of weight when the patient is engaged in any occupation and recovery in a remarkable way with a "rest cure"; (8) occasionally there is marked hæmatemesis.

The condition is usually diagnosed as duodenal ulcer or gastric ulcer. The patients are often subjected to gastro-enterostomy, appendicectomy or a pelvic operation, or at times all three operations, in the hope of securing relief. The X-ray appearances in the worst case are shown in Figure XVII.. The lower margin of the third part of the duodenum has the same shape as the dilated œsophagus in cardiospasm.

When the abdomen is opened the duodenum rolls into the wound like a segment of obstructed intestine. (See Figure XVIII..) There is a large sac at the first part and also at the third part. The latter extends over the promontory of the sacrum and to the superior mesenteric artery, where it stops short. The duodenum, on the other side of the artery, is collapsed and small. The pylorus may be normally contracted, when the patient presents symptoms more of a duodenal type. It may be patent, admitting three or four fingers and incapable of being delimited, when gastric symptoms dominated the picture. The stomach is dilated with air and is atonic.

The main interest attaches to the ætiology of this condition: (*a*) Is it a "nerve block" of Keith, due to disorder of an Auerbach's "tissue node" at the duodenal jejunal flexure? (*b*) Is it a dilatation of the stomach and duodenum following some general neuro-muscular disorder of tone? Or (*c*) Is it secondary to the obstruction of the superior mesenteric artery, brought about by the increased drag on it in enteroptosis?

This chronic duodenal ileus, without doubt, is the condition analagous to and with the same underlying chronic cause as acute dilatation of the stomach or acute gastro-mesenteric ileus. I have seen this following operations and arising *de novo*.

Three facts stand out of the mass of literature on this latter subject: (1) The dilatation has come on suddenly while the stomach was being handled, suggesting a neurological cause. (2) The duodenum was involved with the stomach. (3) The prone position and stomach pump was by far the best cure. Other measures have a long list of fatalities to their credit. Because of this fact and since chronic duodenal ileus is only found in cases of enteroptosis, I believe this condition may be due to the increased pressure of the superior mesenteric artery on the duodenum. There is no hypertrophy of the stomach, because of the intermittency of obstruction. Again, the prone posture treatment strikingly relieves the symptoms in the chronic condition, the bad effects of which have been exaggerated by an unwarranted gastro-enterostomy. I shall give an example of this later in this paper.

Figure XIX. (*i.*) shows diagrammatically how the small intestines are held up on the inclined plane by the tone of the abdominal muscles.

Figure XIX. (*ii.*) shows the relaxed back muscles, the straight spine, the hypotonic abdominal muscles

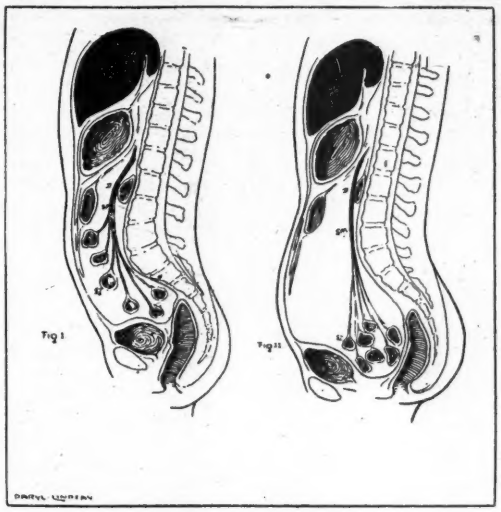

FIGURE XIX..
Prolapse of Intestines into Pelvis in Visceroptosis and Arterial Pressure on Duodenum.
D: Duodenum.
SM: Superior mesenteric artery.
SI: Small intestine.

and the sagged pelvic floor of enteroptosis. The small intestine is thus carried low in the pelvis and not supported; consequently, there is a very big drag on the artery, which must compress the duodenum. This is probably a late stage in visceroptosis. I have frequently seen an acute duodenal ileus supervene after an operation in the upper abdomen in persons with visceroptosis.

Gastro-Enterostomy in Duodenal Ileus.

Some attempts to cure this state of affairs by a gastro-enterostomy have been most disastrous. I propose to direct your attention to the study of three of these cases in which it was necessary to undo the anastomoses. They were most illuminating. Two of the patients were seen with Dr. Stawell. On one of them he had made minute observations over a period of 15 years. The dilated duodenum was noticed and discussed when the gastro-enterostomy was done nine years ago; but its significance was not then appreciated. The third was referred to me by Dr. Sewell for operation.

These patients all had the same symptoms and signs that I have just indicated; but they dated their acute misery from the time of the gastro-enterostomy. In all three cases X-ray examination in the upright posture after a meal disclosed the fact that the food shot out of the stomach in a quarter of an hour into an intestine which had become nearly as big as a stomach. This was associated with a nauseating "all gone" sensation. From twelve to twenty-four hours later this was followed in one patient by a profuse fermentative "explosive motion"; this would not happen if the patient lay down for an hour after meals. Two of the patients preferred to spend most of their time on their backs in order to get comfort. One of them spent nine months in this way.

Apparently this sudden fall of food into the intestine caused the intense nausea that was present to a greater or less extent in both patients. The

nausea would not occur when the patients were lying down and then it was found by X-ray examination that the stomach emptied very slowly in the recumbent position.

These patients lost weight very rapidly if they lived an ordinary life and got fat very quickly in bed. None of them were capable of the feeblest effort of work. They were the worst type of chronic invalid. It was thought that the marked wasting and the copious, fermentative, explosive stools were due to lack of pancreatic digestion, as the pancreatic secretion with no *vis a tergo* was hindered by the compressing artery from mixing with the food, which, in passing on rapidly, got a big start. The patients were operated upon with a view to undoing the gastro-enterostomy.

Figure XX. shows the pathological condition found. It includes (*i.*) a huge upper jejunum, (*ii.*) a very large stoma, situated well to the left, (*iii.*) a very small, functionless afferent loop to the stoma and (*iv.*) a very dilated duodenum. The very small and functionless afferent loop rather confirmed the theory that the main feature in these cases was imperfect pancreatic digestion. Since the operation, all three patients have been dramatically better. The malnutrition, nausea and "explosive motions" have cleared up and they are now able to play and work. I have no doubt that they will gradually sag back to a certain amount of digestive disability, as a result of the pathological condition at the root of duodenal ileus.

Duodenal ileus may be present in and may even be a cause of duodenal ulcer. In the light of my experience, to do a gastro-enterostomy in such a combination is to invite trouble.

Having found this condition when we expected duodenal ulcer, can we do anything to remedy it by operation?

Operation in Duodenal Ileus.

Figure XVIII. (*i.*) and (*ii.*) show a very simple procedure which I have done in three very bad cases

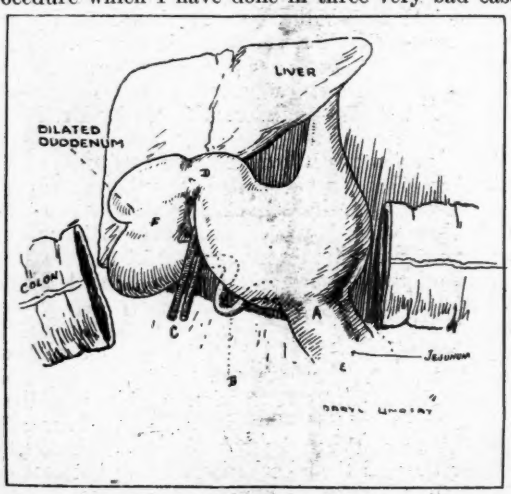

FIGURE XX.
A: Very large gastro-enterostomy stoma.
B: Very small afferent loop to stoma.
C: Superior mesenteric artery.
D: Pylorus.
E: Very dilated duodenum.

with great relief and no evil effects. In one case the operation was performed nine months ago. Whether this should be practised on the less severe cases I am not prepared to say.

Results.

No patient was refused radical operation, no matter how severe the condition. Some of these late derelict ulcer patients with secondary nutritional disturbances were like living skeletons. Out of 82 patients, one in whom I performed partial gastrectomy died three days after operation and another in whom an extensive resection of the lesser curvature was necessary, died four weeks after of broncho-pneumonia (influenzal). The latter death was probably not attributable to the operation. In these patients, if carefully operated upon, recovery was just as unexpected as was the fatal termination in patients with malignant disease after an operation of the same severity.

This report of my gastric work is perhaps somewhat disconnected; but that is just how these difficulties and problems were presented to me at the operation table. Some of the earlier work, in the light of subsequent knowledge and experience acquired, would perhaps be abandoned. Some of the work, perhaps, one would like to recall; but, set down just as it occurred, I hope, as an experience, it will be useful to others as it has been useful to me.

Some Conclusions.

(1) Just as it is necessary for a surgeon to have a working knowledge of bacteriology, so he must educate himself in radiology.

(2) The proper appreciation of the clinical symptoms of ulcer still ranks as high in diagnosis as the X-ray findings.

(3) A "surgical" ulcer cannot always be detected by external examination of the stomach.

(4) If no ulcer is found, a search will reveal a cause for the symptoms and this can be dealt with.

(5) In well established gastric ulcer some form of partial gastrectomy suitable to the situation of the lesion is advisable:

(*a*) If the ulcer is distal to the middle of the stomach, some form of gastro-intestinal anastomosis is often, but not always, necessary.

(*b*) If the ulcer is situated proximal to the middle of the stomach, partial gastrectomy, by special methods (with no gastro-intestinal anastomosis), is satisfactory.

(6) Large, late, doubtfully operable, penetrating and widely adherent and scarcely accessible ulcers can nearly always be safely removed by adopting special technique. The immediate and remote results are good.

(7) Different types of duodenal ulcer require different methods of operation.

(8) A new operation is suggested for well established duodenal ulcers.

(9) Chronic duodenal ileus, the cause of which is probably mechanical, gives rise to symptoms that may be confused with those of duodenal ulcer.

(10) Gastro-enterostomy, done for or in the presence of duodenal ileus, may give rise to a distressing train of symptoms.

(11) Duodeno-jejunostomy is with some diffidence practised in some cases of duodenal ileus.

I am indebted to Dr. Hewlett for several beautiful instantaneous skiagrams and to Mr. Daryl Lindsay for his skill in illustrating this paper.

Reports of Cases.

A CASE OF VOLUNTARY CONTROL OF THE FUSION FACULTY.

By **Sir James Barrett, K.B.E., C.B., C.M.G., M.D., M.S., F.R.C.S. (Eng.),**
Ophthalmologist to the Melbourne Hospital and Consulting Oculist, Third Military District.

A.B., aged 28, was referred to me for ophthalmic examination. He was under observation for some mental disturbance with a suspicion of incipient general paralysis. The fundus and media were normal and the following was the error of refraction:—

Right eye .. .. C + 0.590° = 6/4
Under mydriatic
Left eye .. .. C + 0.5130° = 6/4

He had binocular vision. He possessed, however, the remarkable faculty of being able to dissociate the two eyes and to cause diplopia by moving either eye outwards, either separately or together. When he fixed with one eye and diverged the other, the deviation was about 20°.

He could not effect any vertical dissociation. He could fix with either the right eye or the left eye and move the non-fixing eye out 20°, or he could turn both eyes out at the same time each about 20°. He stated that he had been able to do this all his life and that it was just the same thing to him as moving the hand. He possessed great powers of convergence and could converge to a point approximately five centimetres from the ocular base line. With the tropometer the excursion of the two eyes was as follows:

	Up.	Down.	Out.	In.
Right eye	25°	35 = 40°	50°	30°
Left eye	25°	35 = 40°	40°	40°

This is the only case that I have ever seen in which an individual had voluntary control over the eye movements, to the extent of being able to break the fusion faculty whenever he desired. There probably have been other instances, but I have been unable to lay my hand on an account of them. It is noteworthy that they can only be broken by the action of the external rectus.

The notes of this case were kindly taken by Dr. Parnell.

Reviews.

THE PROBLEM OF VENEREAL INFECTIONS.

Archdall Reid's remarkable work on the prevention of venereal disease[1] marks another stage in a long controversy, but it differs from previous communications in its aggressive character. It places those who object to prevention on the ground of morality on the defensive. A considerable portion of the book is devoted to a discussion of the moral problem and much attention is given to the defence of the National Council for Combating Venereal Diseases put up by its supporters in the House of Lords and to the author's running fight with the authorities during the war. The author states that venereal disease presents us with two distinct, but related, problems: "Is it right to prevent these maladies?" and "is it possible to prevent them?" If the first question is answered in the negative, the second is immaterial. Much trouble is therefore taken to show why it is right to prevent them. The author's attitude is well indicated by the following extract:

"The money and time spent on the new apparatus was entirely wasted. The soldiers continued to pour into hospitals. The German offensive broke. The British line was smashed. Nearly 100,000 British soldiers went into captivity. Some hundreds of thousands suffered death or wounds. The war was prolonged. The cost in money alone ran into thousands of millions. Immature boys and fathers of families training in England were sent to fill the depleted ranks. At that time there were, but need not have been, in the venereal hospitals or in depôts as convalescents, British, French and American soldiers, mature and trained men, otherwise fit for active service, sufficient not for an army corps only, but for a great army. All these men had become diseased after the authorities had learned how to prevent disease. They were put out of action and the allied cause brought to the verge of ruin by the fanaticism of a few 'influential people' and the complaisance or timidity of a few obliging officials."

He goes on to say that, in his opinion, venereal disease does not check immorality, but tends vastly to increase it. He refers to the lack of education on the subject of the venereal disease problem and states that during the last two generations the zeal of the virtuous has slumbered profoundly, unless someone has tried to prevent disease. There is no doubt whatever that in Australia it is only when attempts have been made to introduce prophylaxis that the public has given the matter acute attention.

The iconoclastic style of the author may be gauged by the following extract. Referring to the work of the Royal Commission and of the National Council for Combating Venereal Diseases, he says:

"At that time it was calculated that there were in the country 3,000,000 people actually suffering from syphilis and since gonorrhœa is five or six times as common as syphilis, many millions more suffering from gonorrhœa. However, the Commission gave its blessing to the National Council, which thereupon started hopefully on its mission of emptying the Atlantic with a tea-cup decorated with a text."

A recent writer has pointed out that the total extirpation of venereal diseases by the combined action of the governments of the nations would be comparable to the victory of Charles Martel. Those who study the data, will realize that nothing stands in the way of such a victory on the medical side. The difficulties are due to varied moral concepts.

The book should find its place on the shelves of all those who wish to hear both sides.

[1] Prevention of Venereal Disease, by Sir G. Archdall Reid, K.B.E., M.B., C.M., F.R.S.E., with an Introductory Chapter by Sir H. Bryan Donkin, M.D., F.R.C.P.; 1920. London: William Heinemann, Limited. Sydney: Angus & Robertson, Limited; Crown 8vo., pp. 447. Price, 18s.

THE HYGIENE OF PREGNANCY.

The third edition of "Maternitas,"[1] a book concerning the care of the prospective mother and child, has been completely revised by the author, Dr. Charles E. Paddock.

It is an excellent little book on the subject, clearly written, eminently practical and contains essentials without unnecessary padding. It is a book that medical men can safely recommend to expectant mothers, as it deals with hygienic and preventive measures before pregnancy and after labour. In the chapters on the hygiene of pregnancy and the care of the baby, young mothers will find much sound and valuable advice. The indications for seeking medical advice are clearly pointed out. There is a useful appendix containing recipes for various foods and local therapeutic measures.

The general get-up of the book, the printing and illustrations are excellent and we may add the young practitioner himself will glean many useful hints from its perusal.

[1] Maternitas: A Book Concerning the Care of the Prospective Mother and Her Child, by Charles E. Paddock, M.D.; 1920. Chicago: Cloyd J. Head and Company; Melbourne: Stirling & Company; Crown 8vo., pp. 210, with numerous illustrations. Price, $1.75.

Naval and Military.

APPOINTMENTS.

The following appointments, etc., have been notified in the *Commonwealth of Australia Gazette*, No. 10, of January 27, 1921:

Australian Military Forces.

Lieutenant-Colonel R. E. Roth, C.M.G., D.S.O., V.D., Unattached List, 2nd Military District, to be Colonel, 28th November, 1915.

Lieutenant-Colonel W. W. Giblin, C.B., V.D., Australian Army Medical Corps, to be Colonel, supernumerary to the establishment of Colonels, and with pay and allowances of Lieutenant-Colonel, 28th November, 1915.

Lieutenant-Colonel (Honorary Colonel) the Honourable J. L. Beeston, C.M.G., V.D., Australian Army Medical Corps, to be Colonel, supernumerary to the establishment of Colonels, and with pay and allowances of Lieutenant-Colonel, 30th November, 1915.

Lieutenant-Colonel A. T. White, C.M.G., V.D., Australian Army Medical Corps, to be Colonel, supernumerary to the establishment of Colonels, and with pay and allowances of Lieutenant-Colonel, 1st December, 1915, and to be transferred to the Unattached List, 1st January, 1920. (This cancels the notification respecting this officer which appeared in Executive Minutes, No. 78/1920 and No. 497/1920, promulgated in *Commonwealth of Australia Gazettes*, No. 20 and No. 89, dated 19th February, 1920, and 21st October, 1920, respectively.)

Lieutenant-Colonel (Honorary Colonel) C. H. W. Hardy, D.S.O., V.D., Australian Army Medical Corps, to be Colonel, supernumerary to the establishment of Colonels, and with pay and allowances of Lieutenant-Colonel, 1st December, 1915.

Lieutenant-Colonel J. A. Dick, C.M.G., V.D., Australian Army Medical Corps, to be Colonel, supernumerary to the establishment of Colonels, and with pay and allowances of Lieutenant-Colonel, 17th January, 1920.

Major (Honorary Colonel) H. A. Powell, C.M.G., V.D., Unattached List, 4th Military District, to be Colonel, 18th January, 1920.

Major (Honorary Colonel) C. T. C. de Crespigny, D.S.O., Australian Army Medical Corps, to be transferred to the Unattached List, 4th Military District, 1st July, 1919, and to be Colonel, 18th January, 1920. (This amends the notification respecting the transfer of this officer to the Reserve of Officers, which appeared in Executive Minute, No. 639/1919, promulgated in *Commonwealth of Australia Gazette*, No. 110, dated 18th September, 1919.)

Brevet-Major R. Fowler, O.B.E., Australian Army Medical Corps, to be Colonel, supernumerary to the establishment of Colonels, and with pay and allowances of Major, 22nd January, 1920. (The notification respecting the promotion of this officer to rank of Major, which appeared in Executive Minute, No. 571/1920, promulgated in *Commonwealth of Australia Gazette*, No. 106, dated 2nd December, 1920, is cancelled.)

Major K. Smith, C.M.G., Australian Army Medical Corps, to be Colonel, supernumerary to the establishment of Colonels, and with pay and allowances of Lieutenant-Colonel, 22nd January, 1920. (The notification respecting the promotion of this officer to rank of Lieutenant-Colonel, which appeared in Executive Minute, No. 378/1920, promulgated in *Commonwealth of Australia Gazette*, No. 67, dated 19th August, 1920, is cancelled.)

Major T. P. Dunhill, C.M.G., Australian Army Medical Corps, to be Colonel, 24th January, 1920, supernumerary to the establishment of Colonels, and with pay and allowances of Major from 24th January, 1920, to 30th June, 1920, and to be transferred to the Unattached List, 1st July, 1920.

Major (Honorary Colonel) W. E. Summons, O.B.E., Australian Army Medical Corps, to be Colonel, supernumerary to the establishment of Colonels, and with pay and allowances of Lieutenant-Colonel, 24th January, 1920.

Major A. G. Butler, D.S.O., Australian Army Medical Corps, to be Colonel, supernumerary to the establishment of Colonels, and with pay and allowances of Lieutenant-Colonel, 24th January, 1920.

Colonel J. M. Y. Stewart, C.B.E., D.S.O., to be appointed from the Reserve of Officers to the Unattached List, 2nd Military District, 29th January, 1920.

First Military District.

Australian Army Medical Corps—

To be Lieutenant-Colonel—

Major (Honorary Lieutenant-Colonel) T. G. Ross, D.S.O., 1st July, 1920.

Reserve of Officers—

The temporary rank of Major granted to Honorary Captains T. Leckie and D. E. Trumpy is terminated, dated 3rd December, 1920, and 8th December, 1920, respectively.

The resignation of Major T. C. C. Evans, D.S.O., of his commission is accepted, 31st December, 1920.

Second Military District.

Australian Army Medical Corps—

The temporary rank of Major granted to Captain H. H. Marshall is terminated, 31st December, 1920.

Captain H. H. Marshall to be placed on the retired list, with the honorary rank of Major, and with permission to retain such rank and wear the prescribed uniform, 1st January, 1921.

Unattached List—

Colonel R. E. Roth, C.M.G., D.S.O., V.D., to be placed on the Retired List, with the honorary rank of Brigadier-General, and with permission to retain such rank and wear the prescribed uniform, 1st January, 1921.

The temporary rank of Lieutenant-Colonel granted to Major A. J. Hood, V.D., is terminated, 31st December, 1920.

Major A. J. Hood, V.D., to be placed on the Retired List, with the honorary rank of Lieutenant-Colonel, and with permission to retain such rank and wear the prescribed uniform, 1st January, 1921.

Australian Army Medical Corps Reserve—

To be Honorary Captain—

Honorary Captain F. C. Thompson to be transferred from the Australian Army Medical Corps Reserve, 5th Military District, 1st January, 1921.

Third Military District.

Australian Army Medical Corps—

To be Lieutenant-Colonels—

Majors (Honorary Lieutenant-Colonels) C. G. Shaw, D.S.O., and J. A. H. Sherwin, 1st July, 1920.

Colonel C. H. W. Hardy, D.S.O., V.D., to be placed on the Retired List, with the honorary rank of Brigadier-General, and with permission to retain such rank and wear the prescribed uniform, 9th January, 1921.

Lieutenant-Colonel G. Horne, V.D., to be placed on the Retired List, with the honorary rank of Colonel, and with permission to retain such rank and wear the prescribed uniform, 1st January, 1921.

Reserve of Officers—

Major J. C. P. Strachan to be transferred to the Australian Army Medical Corps and to be appointed Captain, temporarily, 1st October, 1920.

Major M. B. Johnson to be transferred to the Reserve of Officers, 5th Military District, 30th November, 1920.

The first regional conference instituted at the International Health Conference at Cannes was held in Washington from December 6 to December 13, 1920. The subject of discussion was venereal disease. A programme was drawn up for a three years' campaign, to extend over the whole of North and South America, to embrace both the treatment and prevention of venereal infection. The conference was organized by the Committees of the United States Inter-Departmental Social Hygiene Board, the United States Public Health Service, the American Red Cross Society and the American Social Hygiene Association. The President of the Conference was Professor William H. Welch, of the Johns Hopkins University.

The Medical Journal of Australia.

SATURDAY, FEBRUARY 12, 1921.

A Federal Ministry of Health.

Tidings of great importance and intense interest to the profession come from Melbourne. The Federal Government has decided to extend its activities in the interest of the public health far beyond the somewhat narrow confines which have restricted them hitherto. A Department of Public Health is to be instituted with a responsible Minister at its head. We understand that the appointment is to be made without the granting of a special portfolio. The story of the formation of the new department is bound up with the activities of the Rockefeller Foundation. Dr. Victor G. Heiser, Director for the East of the International Health Board of the Rockefeller Foundation, has recently visited these shores. He and his colleague, Dr. W. A. Sawyer, who is the Senior State Director of the same Board, and who is well known in connexion with the control of the Australian Hookworm Campaign, have held several conferences with the Prime Minister and other representatives of the Commonwealth. Dr. Heiser stated that his institute was desirous of further promoting its activities in Australia and declared his intention of recommending to the Institute that it place at the disposal of the Commonwealth the services of three investigators with special qualifications—one a specialist in industrial hygiene, the second a specialist in tropical hygiene, and the third a specialist in sanitary engineering. He made this offer contingent upon an agreement by the Federal Government to co-ordinate its health activities with those of his institute in Australia and to create a special Department of Public Health. At the same time, he suggested that the institute might later on lend to the Government an expert organizer of laboratories of preventive medicine. The Federal Ministry decided to accept the offer and to create a new department for the purpose of expanding the existing activities of the Federal Quarantine Service and of undertaking such other tasks as may be regarded as Federal.

It should not be long before the community recognizes the great value of the new departure. Public health laboratories are to be established in various centres for the investigation of industrial and tropical diseases. These centres include Kalgoorlie, Port Pirie, Bendigo, Lismore, Rockhampton, Cairns, Mackay, Thursday Island, Port Moresby and Darwin. The acceptance by the Commonwealth of a mandate over certain former possessions of late enemy countries has accentuated the need for a strenuous campaign against tropical diseases, including malaria, and it is proposed to establish a further laboratory centre at Rabaul. The activities of the investigators under the Rockefeller Foundation in regard to hookworm and malaria in Australia and neighbouring islands are well known and, with their assistance, a campaign full of immense possibilities against tropical diseases is assured. Hardly of less importance is the investigation of occupational diseases in industrial areas—the pneumonokonioses, tuberculosis, lead poisoning and so on. Local, isolated investigations of industrial diseases have in late years been carried out, but the absence of a broad scheme of investigation, the limitation of the expense involved with its consequent limitation of the amount of necessary apparatus and exclusion of many competent investigators untempted by the modest remuneration offered, and, finally, the undesirable haste with which the investigations had to be carried out—all these factors necessarily depreciated the value of the work done. With the generous assistance of the Rockefeller Foundation the new Ministry of Health has an opportunity of carrying out investigations in a careful, scientific manner, aided by trained and expert investigators and, it is to be hoped, unmoved by the political exigencies of the day.

Repeated pleadings for the establishment of a scheme of preventive medicine have been made in these columns. We have deprecated from time to time the inaction of our public health services and have asked for co-ordination and reciprocal action between the services in the absence of a unified system of control. It has been pointed out that the domains of curative and preventive medicine are distinct from one another. One is the concern primarily

of the private practitioner and the other is the function of the State. One is concerned with the relationship between patient and physician, the other is bound up with team-work and organized scientific investigation. The problems of preventive medicine are as urgent here as in other parts of the world and it cannot be claimed that we have kept abreast with other countries in our efforts to elucidate them. Now, however, a start is about to be made, and the auguries are good.

THE ENDOCRINE SYSTEM AND THE PSYCHO-NEUROSES.

Recent investigations shed a more hopeful light on the treatment and prognosis of the psychoses and neuroses. The descriptions in the text-books of the various functional mental illnesses—hysteria, psychasthenia, neurasthenia, melancholia, mania, paranoia and *dementia præcox*—apply to well-established disease processes in which treatment is difficult and prognosis hazardous. Attention is now being directed to the earlier manifestations of the psycho-neuroses which appear before the mental illness has so far advanced as to come within the domain of certifiable insanity.

The war has been the means of calling attention to a group of psycho-neuroses in soldiers in which profound reactions of certain parts of the body to "psychic trauma" have been displayed. These reactions affect chiefly the vegetative or endocrino-sympathetic system. Dr. David Orr[1] points out that emotional states alter and modify the secretions of the ductless glands and these in turn react upon the central nervous system, producing those manifestations of mental and physical disorder with which the war has made us so familiar.

The sympathetic system would appear to be so intimately linked up with the endocrinic glands that Dr. Orr feels justified in using the term "endocrino-sympathetic system." This involuntary nervous system exerts a neuro-secretory action upon the ductless glands and maintains the functional relationship between the different organs of nutrition. Conversely, the secretions of the endocrine glands exert a powerful influence on the involuntary nerves. The tone and equilibrium of the whole sympathetic system is governed and regulated by the hormones which the glands pour into the blood stream. Judged from a physiological point of view we lead two lives—a life of nutrition and a life of relation. The life of nutrition has to do with the growth and metabolism of the body and is intimately concerned with the internal secretions and the involuntary nervous system which correlates and governs them. This life does not pass over the threshold of consciousness. The life of relation, on the other hand, concerns our attitude towards the outside world and keeps us in touch with our environment, so that we may modify our attitude towards it. The life of relation is controlled by the central nervous system. There are intimate functional as well as anatomical relationships between the vegetative and central nervous systems, so that a morbid disturbance of the life of relation may produce profound reactions in the endocrino-sympathetic system which controls the life of nutrition and *vice versa*. It is well known, for example, that mental shock, fright or worry may produce all the symptoms of exophthalmic goître, and that some patients suffering from hyperthyreoidism soon show mental degeneracy, become wilful and wayward and convert a quiet domestic home into a "house of hell," to borrow Shakespeare's phrase.

It is probable that all emotions are associated with variations in the secretions of the ductless glands and that these variations are dependent on the nature of the emotion. It is known that after a person has suffered intense pain there is unusual activity on the part of the suprarenal glands and adrenalin is secreted in greater quantity and is poured into the blood stream. A comparison may be made between this phenomenon and the known facts in connexion with the influence of the emotions on the commoner and more material secretions. Under the influence of sorrow there may be a copious outpouring of tears. Excitement or worry may cause polyuria and frequency of micturition. The classical experiments of Pawlow on dogs showed in a graphic manner that the mere sight of meat by a hungry animal led to a marked secretion of gastric juice. These are examples of the intimate relationship between psychic influences and the common secretions of the body and it is not unreasonable to suppose that there is an equally intimate connexion between the emotions and the endocrinic glands.

It should be stated here that the psycho-neuroses appear mostly in those people who have inherited a neuropathic tendency. In the ordinary routine of life there is an equilibrium of relationship between the functions of the ductless glands, the sympathetic chain and the cerebro-spinal axis. But under the stress of great emotion, especially when the emotion is suppressed and especially at those periods of life when certain endocrine glands are entering on or departing from increased physiological activity, *e.g.*, at puberty or the menopause, this equilibrium may be disturbed. As a result the physiological balance of the hormones is altered and the hormones in turn react back upon the nervous system, tending to reproduce the emotional state. It will thus be seen that a vicious circle is soon established. Psychic trauma produces emotional disturbance, which reacts upon the sympathetic-ductless gland system and this reproduces the emotional disturbance which is stored up in the memory. The emotional activity is so often repeated that it becomes more or less chronic and is aroused by slight internal or external stimuli which under normal conditions would produce no effect.

Mental illnesses are, therefore, in their early stages at least, disturbances of physiological processes and it is possible that by appropriate suggestion and treatment they may be cured. Hitherto the psychiatrist has studied his subject too much from a psychological and too little from a physiological point of view. With the aid of recent researches to modify his outlook, a more hopeful basis of treatment is assured.

[1] *Edinburgh Medical Journal*, October, 1920.

RESIDUAL PULMONARY AFFECTIONS.

The influenza epidemic which raged in Europe and America during 1918 and in Australia in the following year was not content with the destruction of an enormous number of valuable lives. It left behind it a legacy of chronic ill-health, from which many thousands of persons still suffer. Chief among the forms of this unwelcome inheritance are the various residual pulmonary affections to which no accurate denomination has been given. It has been not uncommonly urged and believed that the persistence of physical signs in the chest after an attack of influenza with severe pulmonary involvement was evidence of the presence of a tuberculous process in the lungs and that this process was either a fresh infection involving the already damaged lung substance or, more usually, a recrudescence of a latent tuberculosis. How far this belief is correct is as yet impossible to determine. A few months after an attack of influenza a patient may complain of failure to recover his usual good health. He suffers from a chronic cough with copious expectoration, becomes more and more short of breath and there may be streaks of blood in his sputum. Even a small but definite hæmoptysis may take place. He may be comparatively well nourished, but the breathlessness, the spasmodic cough and his feeling of languor and inability to "carry on," raise a strong suspicion of tuberculosis. Physical examination of the chest, however, reveals signs at one or both bases of the lungs only; the apices are apparently uninvolved. There may be limitation of movement at the affected base, increased vocal fremitus, some dulness on percussion, perhaps even bronchial breathing with bronchophony and pectoriloquy, and an aggregation of crepitations or râles which may or may not be altered in intensity or number by coughing. Repeated examinations of the sputum fail to discover the *Bacillus tuberculosis*. All these evidences point to the presence of an unresolved pneumonia, but exactly what factors delay or prevent resolution and what pathological relationship the unresolved consolidation has to the preexistent pneumonia, are not yet definitely known.

Dr. Edward N. Packard[1] of New York, calls attention to the fact that now and for a few years to come, owing to the marked increase in the incidence of pneumonia, many patients will come under observation who are suffering from these chronic pulmonary disorders, and he issues a warning to physicians against the tendency to ascribe these conditions to tuberculosis indiscriminately. Before the year 1918 Australian physicians were not unaware of cases of lobar pneumonia which proceeded neither to death nor early recovery. For some reason or other resolution did not occur and the fibrinous exudate which poured into the pulmonary vesicles during the stage of red hepatisation, became (so it would seem) gradually substituted by fibrous tissue. The signs of pneumonia remained for some considerable time and a suspicion of tuberculosis was raised. Often enough repeated examination of the sputum was made, but tubercle bacilli were not found. A diagnosis of chronic interstitial pneumonia or simply "chronic pneumonia" was made. There were our experiences in Australia when, except in the case of children, we were more acquainted with pneumonia of a lobar than of a lobular type. Dr. Packard informs us from his consideration of the large number of cases of lobular pneumonia which have come under his notice, that the exudate of that disease undergoes fibrous organization more commonly than the exudate of croupous pneumonia, which is almost invariably absorbed. If it is granted that the severe pulmonary lesions met with in Australia during the epidemic of 1919 were of the nature of broncho-pneumonia, most observers will agree with him. Delayed recovery with failure of the physical signs to disappear within a reasonable time was not uncommon in the experience of those who had under their care a large number of patients with marked involvement of the lungs.

The after-history of these patients should make an interesting subject of research. If certain parts of the lung tissue become replaced by fibrous tissue and if the pleura on the affected side becomes thickened and its parietal portion bound by adhesions to its visceral portion, then the diagnoses of "pulmonary fibrosis," "chronic interstitial pneumonia," "peribronchial fibroid pneumonia," "chronic adhesive pleurisy" and so on become intelligible. The process is, however, but dimly understood and Dr. Packard does not give us any substantial assistance. Why certain cases of pneumonia undergo resolution and recovery, why others proceed to the condition called "pulmonary fibrosis," why others again ultimately become cases of bronchiectasis, are questions which have as yet received no very satisfactory answer. There is still a vast field awaiting investigation in the chemistry and physics of the chest. While many branches of medicine have progressed by leaps and bounds during the last decade, the study of pulmonary disorders remains at a comparative standstill and we are little further advanced than were our fathers.

Dr. Packard's warning against the indiscriminate labelling of these conditions as tubercular in nature merits, however, very earnest consideration. There is a tendency to blame the tubercle bacillus for many chronic, ill-defined pulmonary disorders. In our last issue we published a description of the case of a child under the care of Dr. A. Jeffreys Wood in the Melbourne Children's Hospital. The patient, a boy of eleven years, was admitted in May, 1920, suffering from broncho-pneumonia complicating whooping cough, and for a period of seven months he had definite physical signs at the base of his right lung and a pyrexia which was broken only by a few periods of quiescence. The boy has now resumed his usual state of health and Dr. Wood points out that this case is an example of the prolongation of a broncho-pneumonia when the *B. tuberculosis* could not reasonably be incriminated. To diagnose tuberculosis in the absence of very definite evidence is to do a grave injustice to the patient. It throws him into a state of mental dejection and it inflicts on him a social ostracism which, if not justifiable, is none the less real. At the same time, it should not be forgotten that some post-influenzal pulmonary conditions are of a tuberculous nature and every effort should be made to diagnose them.

[1] *Journ. Amer. Med. Assoc.*, December 4, 1920.

Abstracts from Current Medical Literature.

SURGERY.

(56) Gun Shot Wounds of the Spinal Cord.

Thorburn (*Brit. Journ. of Surg.*, October, 1920) investigated 100 specimens in the War Museum showing spinal cord injury. Gun shot wounds of the spinal cord may result from: (1) direct impact of a missile, when fragments of clothing or bone may be left imbedded in the cord; (2) indirect impact of bone fragments; and (3) contusion by foreign bodies, by displaced bone fragments or by subluxation of bones, *e.g.*, the widespread divulsive action of a missile passing by at high velocity. In all cases there is liable to be damage beyond the area of apparent injury, especially in the grey matter of the anterior cornua. When the impact is direct septic meningitis generally ensues. Untorn *dura mater* is the best barrier and septic meningitis is generally absent in the case of contusions. Meningitis tends to spread upwards continuously, but may unexpectedly flare up at a distance. Hæmorrhage sufficient to cause serious compression is very rare, but annular cicatrices are a common sequela of hæmorrhages.

(57) Causation of Appendicitis.

Rendle Short (*Brit. Journ. of Surg.*, October, 1920) investigated the causation of appendicitis. He considers there has been an actual rise in its incidence, especially during the period 1895-1905. The rise was first noticed in towns. The privations of war did not influence the incidence. Inmates of institutions on plain diet seem to be comparatively immune. In Asiatics, Polynesians and Africans it is very rare unless they take to European food, when it becomes common. It is rare in wild animals, common in animals in captivity. As regards the ultimate cause, the chipped enamel-ware theory is ridiculed, as well as the theory ascribing it to the use of water closets instead of squatting. In reference to many such fantastic suggestions Charles Mercier ironically attributed the disease to the abandonment of wig wearing. After reviewing the various possible food causes, Short suggests that the disease may be due to a diminished consumption of food containing cellulose.

(58) Cysts of the Breast.

Lenthal Cheatle (*Brit. Journ. of Surg.*, October, 1920) publishes the result of his examination of whole sections of female breasts containing cysts. He is strongly of the opinion that cancer can and does begin in cysts. There are two different types of cysts, the difference being in the lining epithelium and in the intracystic growth. Both types are multiple and he has never seen a breast containing a single cyst. One type has its origin in ducts and is lined by duct epithelium. The other is lined by columnar epithelium. No matter what the origin cancer can have its starting point there, and even cysts situated on the extreme periphery not infrequently become malignant. Cysts may assist in the spread of cancer in many ways: (*i.*) cancer-bearing cysts may coalesce; (*ii.*) a cancer-bearing cyst may invade a simple cyst; (*iii.*) a cancer-bearing periduct lymphatic may invade a simple cyst or a cancer-bearing cyst. He considers that it is mainly the first type of cyst that harbours cancer infection.

(59) Abscess of Lung.

Peters (*Journ. Amer. Med. Assoc.*, October 16, 1920), discussing abscess of the lung, emphasizes the great difficulty of distinguishing it from gangrene. Many cases have recently been reported following tonsillectomy under general anæsthesia; more commonly, however, it is a complication of pneumonia. Diagnosis is very difficult before extensive destruction occurs, but the history may be suggestive. Cyanosis and clubbed fingers are late signs. Cough, fœtid breath and the expectoration of a large amount of mucopurulent sputum are fairly conclusive. Physical signs are usually those of consolidation or cavity formation. The location of the abscess, the extent of the surrounding area of induration and the relation of the abscess to a bronchus are important points. X-rays are valuable in diagnosis, but several plates taken at intervals are necessary. The presence of a pleural effusion may make the diagnosis more difficult still. Leucocytosis is the rule, but is not invariable. The temperature may vary considerably. Artificial pneumothorax has given good results, but drainage by a two stage operation is the best procedure.

(60) Cancer of the Rectum.

Pauchet (*Presse Médicale*, October 6, 1920) considers the signs and treatment of cancer of the rectum. He quotes Miles's statement that there are 100% relapses after the perineal operation and 25% in three years after the abdomino-perineal method. In diagnosis the danger is of mistaking the bleeding for that due to hæmorrhoids or enteritis. Rectal examination as a routine procedure is the safeguard against the first error. The symptomatology varies with the position of the growth. The superior type tends to cause stenosing symptoms; the anal variety, pain. The ampullary type unfortunately causes no symptoms till late in the disease. Of three patients consulting a surgeon the disease in one will be inoperable, one will be suitable for the perineal operation and the third will require the abdomino-perineal operation. A continent abdominal anus can be obtained by twisting the intestine 180° and passing it through a button-hole stab. Radium has not given the good results which have been obtained in the treatment of uterine cancer. When after resection continuity of the colon with the normal anus is restored, recurrence in the perirectal tissues is common and the anus is often incontinent. The abdomino-perineal is the operation of choice. The perineal operation should be reserved for patients over 60 and for fat and unsuitable subjects.

(61) Cancer of Breast and Non-Malignant Axillary Glands.

Raymond Bonneau (*La Presse Médicale*, August 11. 1920) records the case of a woman who had never been pregnant and on whom he operated for an obviously malignant tumour of the breast. The axillary glands were found to be enlarged, but subsequently, although microscopic section confirmed the diagnosis of the breast condition, the enlargement of the glands was found to be purely inflammatory. He suggests, then, that lymphatic glands may undergo an inflammatory enlargement as part of a defensive mechanism against the cancer cells. He insists that mere enlargement of lymphatic glands, *e.g.*, in the supra-clavicular region, should not be considered a prognostic bar to operation. Even if excision of enlarged glands in all the glandular territory be impracticable, there is still hope for possible cure.

(62) The Continent Gastrostomy.

Soulijoux and Bloch (*Presse Médicale*, November 27, 1920) describe an operation for gastrostomy which is so continent that the patient can cough without forcing out a single drop of gastric contents. It consists in a combination of torsion and invagination of the stomach cone, which is drawn out through an incision in the left rectus muscle. There must be no dragging and no tension on sutures. The stomach cone is rotated through an angle of 90° in the direction of the hands of a watch and the folds sutured with non-penetrating silk to maintain the torsion. The apex, after a punch-form incision has been made, is invaginated and more silk sutures employed. A catheter having been inserted, the base of the cone is sutured to the abdominal wall.

(63) Mesenteric Thrombosis.

George G. Ross (*Annals of Surg.*, July, 1920), discussing mesenteric thrombosis, points out that the superior mesenteric artery is much more frequently affected than the inferior mesenteric artery and that arterial blocking in the mesentery is much more common than venous obstruction. He reports six cases and makes no attempt to differentiate between thrombosis of the mesenteric vessels and embolism. This is often impossible, even at operation or autopsy. When thrombosis occurs, the blood supply of a certain segment of the intestine is stopped or diminished and symptoms of intestinal obstruction develope. Pain, in his experience, has been a prominent symptom. The symptoms of obstruction are slower in onset than in the purely mechanical forms of obstructive ileus, *e.g.*, from adhesions. Venous mesenteric thrombosis has a vaguer symptomatology and a slower course than arterial obstruction and tends to more spontaneous cure. The treatment of mesenteric thrombosis is early operation, but the

procedure must vary with the condition discovered. Resection is indicated if the patient's condition justifies it.

GYNÆCOLOGY AND OBSTETRICS.

(64) Rupture of the Uterine Scar of Cæsarean Section.

Eardley Holland, in an investigation of the subject of rupture during pregnancy or labour of the uterine scar of a previous Cæsarean section, analysed 11,000 cases (*Proc. Roy. Soc. Med.*, November, 1920). He concluded that the frequency of rupture is 4% and that the cause of rupture is imperfect healing and the formation of a thin, fibrous scar instead of muscular union. Thin scars stretch during pregnancy. Rupture may be caused by the intra-uterine tension of normal pregnancy, by the uterine contractions of normal labour or by various accidental factors, such as the insertion of the placenta over the scar, with retro-placental hæmorrhage. It may also be caused by overdistension of the uterus, by prolonged or obstructed labour or by operative interference, such as internal version, the insertion of bags and certain drugs, for example, pituitrin. Rupture occurred almost as frequently during pregnancy as during labour, in the proportion of three to four. It occurred as early as the seventh month. The chief cause of imperfect healing is infection of the uterine wound. Other causes are imperfect suturing and unsuitable suture material. The liability to rupture when catgut is used is two and a half times greater than when silk is the material used. Theoretically, silk-worm gut is the best suture material. The scar of the transverse fundal incision is especially liable to rupture. In the discussion, Munro Kerr considered that there was definite evidence that the uterine scar was not as sound as was generally supposed; that it frequently gave way completely or partially and that in many patients it was much thinned and would easily give way under unusual strain. He now made his incision through the lower uterine segment. Barris was in favour of the classical operation, without sterilization of the patient. Oldfield strongly believed in the use of catgut. He stated that this was the practice in Leeds. Herbert Spencer condemned the use of catgut and preferred silk. Blair Bell stated that he preferred to open the uterus as high up as possible in the upper uterine segment. He used chromic gut. Fourneaux-Jordan had used a continuous catgut suture in 72 cases without one case of rupture. Fothergill agreed with the other speakers that uterine sepsis was the real cause of weak scars and rupture, but considered that the nature of the suture material was unimportant.

(65) The Influence of the Ductless Glands.

Graves (*New York Med. Journ.*, November 6, 1920) discusses two aspects of the relationship that exists between the endocrine system and gynæcological conditions. In the first place, he considers the relation of the ductless glands to the specific neuroses in patients suffering from pelvic disease. He found in an examination of 1,000 private patients that in 84% "nervousness" of a greater or less degree was a part of their complaint; in other words, there was some disturbance of the emotional state. He quotes Cannon's work on the connexion between the adrenal secretion and the emotions of fear, anger and rage and refers to the emotional and physical phenomena which are associated with disturbances of the thyreoid and pituitary functions. He defines functional nervousness as a continuous state of emotional excitement, sensory in character and induced by the reciprocal action under stimulation between the autonomic nervous system and certain glands of internal secretion. For an explanation of these conditions, he inclines to the theories of psycho-analysis, but rejects the extreme Freudian doctrine of the suppressed *libido* and agrees with Adler, who explains the neurotic constitution by assuming that the patient is conscious of a feeling of inferiority, which results from her organic deficiency. This deficiency may or may not be concerned with the sexual glands. It is necessary to distinguish the neuroses which have been acquired as a result of pelvic changes from the constitutional "fixations" of childhood, as well as from the neuroses which are purely psychic and those cases marked by hypersecretion or deficiency of gland products. The aid of the neurologist or internist may be of value. Women are said to be more peculiarly "nervous" than men. The internal glandular equipment of women is, without doubt, more unstable and they are peculiarly liable to the influence of disturbances of the ductless glands. In the second place, the author calls attention to the fact that the ovary has two separately active parts—the interstitial cells and the germ cells. This division is not comparable to the two parts of the pituitary or adrenal glands. Extract of the whole gland is as efficacious in treatment as *corpus luteum* or extract of ovarian residue and it has an undoubted specific action on menstrual irregularities, such as hot flushes, temporary functional amenorrhœa, dribbling before and after the catamenia and "small clotting." In the permanent amenorrhœas, especially those associated with pluriglandular disturbances, it has little or no effect in restoring the menstrual function, but it improves the general health. It is best given in large doses separately from the other gland extracts. In certain types of dysmenorrhœa it is of value, but in the severe types it is of little help. It is not indicated in the treatment of menorrhagia or metrorrhagia.

(66) Cranial and Intracranial Birth Injuries.

Bailey (*Amer. Journ. of Obstet. and Gynec.*, October, 1920) points out that a considerable proportion (about 30%) of still births and early deaths are due to injury to the head of the infant and suggests that in a few instances the lesions lend themselves to treatment. Kerr in 1901 recommended treating spoon-shaped depressed fractures by pressure of the head in the long axis, but the danger from this is intracranial pressure and hæmorrhage. Cushing in 1905 advocated parietal decompression by a large osteoplastic flap; two treated thus recovered and two died. Tweedy (1908) advised that the surgeon make an incision and bore a hook of a volsellum through the depressed bone and raise it. Intracranial hæmorrhage may occur in vertex or breech presentations. It may be due to rupture of cortical vessels from asphyxia, from excessive moulding of the bones with tearing of the meningeal and arachnoid veins or from pressure and traction with forceps. Of 100 cases in the Manhattan Clinic, 40 had cerebral hæmorrhage. Only 10 were not still born. One lived 20 minutes, one 30 minutes, one 3 hours, and the others 14 hours to four days. The hæmorrhage in 18 cases was diffuse over the cerebrum, 11 were specially marked under one bone, two were diffuse and in the ventricles, two in the ventricles alone, one was a diffuse meningeal hæmorrhage with thrombosis in the sinus, two were in the cerebellum, two in the *pia* and two in the *dura*. He concludes that the decompression operation with large flap does not give good results. Cushing had only 4 successes in 9 cases. The Tweedy procedure is open to the objection that there may be fracture and meningeal hæmorrhage under the depression, as occurred in one case. This cannot be detected unless a button of bone is raised at the same time. In the case of still-born children with a strongly beating heart, where respiration cannot be started, further investigation is required. All our present methods of artificial respiration increase intracranial pressure. For these mechanical respiratory apparatus which will inject air and withdraw CO_2 seem the best.

(67) Rectal Examination in Labour.

D. Monash (*Illinois Med. Journ.*, August, 1920) states that, with practice, rectal examination during labour gives most accurate information and combined with abdominal palpation in pregnancy and labour is an efficient substitute for vaginal examination in 90% of normal cases. The advantages of this method are: Rectal examination may be repeated at frequent intervals without risk to the patient, while repeated vaginal examinations are dangerous. Rectal examination is performed more easily and with less preparation of the patient, when it is necessary to decide whether she is in labour and if it is safe to leave her or better to remain at the house. It is a time saver. It is practically painless. In border-line cases, where Cæsarian section is considered, it prevents infection of the vagina. The obstetrician who examines by the rectal route enjoys a justifiable peace of mind and freedom from censure if his patient subsequently developes fever.

Medical Societies.

MELBOURNE HOSPITAL CLINICAL SOCIETY.

A meeting of the Melbourne Hospital Clinical Society was held in the lecture room of the Melbourne Hospital on October 22, 1920, Mr. Basil Kilvington, the President, in the chair.

Dr. Konrad Hiller presented the first case for discussion on behalf of Dr. J. F. Wilkinson. The patient, a man aged 25, a heavy drinker, was admitted to the hospital with jaundice and some swelling of the abdomen. The jaundice was then of eight weeks' standing. There had been complaint of abdominal pain for four weeks and during the week immediately preceding his attendance at the hospital the man's abdomen had become perceptibly enlarged. He admitted having contracted syphilis in November, 1918, and stated that two chancres had developed. He was treated with salvarsan and grey oil injection six weeks later. Altogether about 20 injections of salvarsan and some 60 injections of grey oil were given. The last injection of "606" was given three weeks before the onset of the abdominal pain. Jaundice supervened a few days after the first attack of pain; there had been no hæmatemesis. The enlargement of the abdomen was seen to be progressive. There was tenderness in the left hypochondrium, but there was no undue sensitiveness to palpation of the hepatic region. The systolic blood pressure was 125 mm. Hg.. Except for the presence of bile no changes were detected in the urine and investigation of the cerebro-spinal system was attended by negative results.

A few days after admission paracentesis was carried out and 1.8 litres of bile-stained fluid withdrawn. Later 4.8, 6, 6, 5.4 and 6.6 litres were removed at short intervals.

Dr. Hiller pointed out that excessive indulgence in alcohol and a syphilitic infection dating back eighteen months had preceded the development of jaundice and ascitis in spite of twenty injections of "606" and other anti-syphilitic treatment. There was a condition of hepatic cirrhosis, and the question was how much syphilis had contributed in bringing it about. He had at first suspected that the jaundice was due to the toxic effect of repeated injections of salvarsan. The subsequent course of the illness, however, revealed a cirrhosis of the liver. He was of opinion that, owing to the man's heavy consumption of alcohol, syphilis had made rapid progress in spite of treatment. It was interesting to note that, at the outset of the anti-syphilitic measures, the reaction of the patient's serum to the Wassermann test was interpreted as "doubtful negative," while as late as ten days ago the result of the test was returned as "positive." He proposed to treat the man with large doses of potassium iodide.

Mr. Alan Newton remarked that the possible association of the jaundice with the prolonged series of salvarsan injections had also occurred to him, but the supervention of ascitis seemed to indicate that this was not the sequence of events. Ascitis did not occur with the jaundice attributable to the cumulative effect of arsenical preparations. The rapidly recurring ascitic effusions led him to conclude that in the patient under discussion there was a considerable degree of perihepatitis.

Dr. Wm. Dismore Upjohn, O.B.E., agreed with Dr. Hiller's suggestion regarding the use of large doses of iodide of potassium with the object of promoting the resolution of the perihepatic inflammatory process. Medical treatment, however, could hardly deal with old scar tissue and as it was obvious that the patient could not withstand the recurring ascitic effusions for long, the surgical procedure of omentopexy might be considered.

Dr. N. Hamilton Fairley, O.B.E., contributed some remarks bearing on the treatment of "Wassermann fast" cases of syphilis. He quoted observations in trypanosomiasis, which showed that some types of trypanosomes became immune to arsenic, as other races did to antimony. It had been recommended therefore to use both drugs in treatment a period of arsenic administration being followed by a course of antimony or *vice versa*. It was possible that future work would show that the treponemata of syphilis similarly acquired resistance to a particular arsenical complex and that advantage would be derived from the administration of different preparations, such as salvarsan, neo-salvarsan, luargol, etc., in sequence. The resisting strain might not be immune to all the different molecular complexes.

Dr. Hiller next detailed the case of a man, aged 32, in whom the diagnosis of tuberculous caries of the cervical spine had been established. At the time of his admission on September 14, 1920, the patient complained of pain in the left side of the chest. The pain was of a shooting character, was aggravated by deep inspiration and was somewhat mitigated by lying on the left side. The distribution of the pain followed the course of the fifth and sixth dorsal nerve roots. Inquiry elicited a history of a "similar attack" three months previously, but there had been no recurrence of the pain in the interim. Two months prior to his admission on this occasion the patient had been ill with influenza; otherwise his personal and family history was good and there appeared to be no tuberculosis in the family.

In the physical examination carried out when the man first came under observation, there was recorded a temperature of 39° C., with respiration and pulse rates of 28 and 98 per minute respectively. He lay for the most part on his left side. Kyphosis at the level of the sixth and seventh dorsal vertebræ was apparent. Although no tenderness could be elicited by pressure over the dorsal spines, there was some limitation of movement and slight tenderness over the transverse processes of the vertebræ. Two discharging sinuses were present in the left posterior triangle of the neck, unaccompanied by any palpable glands in this area. No signs of significance were detected in the examination of the chest and abdomen. Psoriasis was evident over the extensor surfaces of both arms. The von Pirquet cutaneous test yielded a slight reaction to human, but no response to bovine, tuberculin. By the injection of bismuth paste and subsequent radiographic examination, the sinuses were shown to track down to the bodies of the sixth and seventh dorsal vertebræ.

Dr. Hiller exhibited the skiagram and remarked that the patient was now very ill; his temperature was of a "swinging" character and he was suffering a great deal of pain. The question for consideration was whether surgical measures offered him any prospect of relief.

Dr. Upjohn commented upon the difficulty of securing complete rest to the spine in adults with tuberculous caries. It was very much easier to accomplish when dealing with children, who could be placed in the appropriate splint or jacket and thereafter could be readily lifted by a nurse. A fixation operation, in which a bone graft extending above and below the operation became part and parcel of the spinal column, had much to recommend it, but he would hesitate to apply such a measure in the presence of a mixed infection, such as obtained in the patient under discussion.

Mr. Basil Kilvington remarked upon the relative positions of the tuberculous process in the spine and the openings of the sinuses. It was usual for the abscess to track downwards if the patient were going about and dorsally if he had been maintained in the recumbent position. He regarded the probability of the presence of tuberculous foci in the bronchial glands or lungs as a drawback attending operative measures in this particular instance.

Dr. Wm. Dismore Upjohn asked attention for a case with somewhat remarkable features. A railway employee, aged 48, was admitted to hospital at 3.15 p.m. on October 10, 1920. Five hours previously he had been seized with very severe pain which he referred to the region of the umbilicus. The pain was of a spasmodic character and recurred every few minutes. In the colicky attacks the patient could not remain still, but no position afforded relief. Vomiting commenced two hours after the onset and was repeated six hours later. The bowels had acted once since the commencement of the illness, but the motion had not been observed. The administration of an enema after the patient's admission to the ward had been attended by no result. On examination the man looked shocked, cyanotic and very ill. The muscles of the epigastric region moved slightly with respiration, but the lower part of the abdominal wall was immovable. By palpation tenderness and rigidity were elicited over the whole abdomen, both signs being particularly well marked across the whole of the lower abdomen. Movable dulness in the flanks was also demonstrated.

A centrifuged specimen of urine showed a few red blood cells and pus cells on microscopical examination.

Inquiry into the patient's past history disclosed the fact that he had experienced a similar illness 16 years ago. The diagnosis made on that occasion was appendicitis; in four days he was back at work. He had indulged liberally in alcohol for many years.

Dr. Upjohn said that the aspect of the patient at the time of his admission was typically that of an abdominal crisis and he decided to operate. Laparotomy was therefore performed twelve hours after the onset through a median, sub-umbilical incision. A large quantity of deeply blood-stained fluid was present in the peritoneal cavity and welled up into the wound. A careful search did not reveal any fat necrosis, nor did subsequent palpation of the pancreas afford any evidence of pancreatitis. The small intestine was plum-coloured and, although not dilated, exhibited definite congestion and thickening of its walls. The most remarkable feature, however, was a very great thickening and fixity of the enteric mesentery, which rendered it impossible to deliver the gut through the abdominal incision.

The man's general condition at operation was very bad; concluding that the underlying cause of the crisis was a mesenteric embolus or thrombosis, Dr. Upjohn closed the abdomen.

On the following morning the patient was distinctly better and during the day a small quantity of blood-stained, serous effusion oozed through the incision. The next day saw further improvement and ultimately the man made a good recovery. Seven days after operation he developed a small carbuncle on his neck; the urine was again examined. Sugar and diacetic acid were shown to be absent and the determinations of urinary diastase and nitrogen were 35 and 25 respectively.

In connexion with Dr. Upjohn's case, Dr. Douglas Thomas drew attention to the condition described as chronic hæmorrhagic peritonitis,[1] which was regarded as analogous to hæmorrhagic pachymeningitis. Layers of new tissue formed on the surface of the peritoneum, with large wide vessels from which hæmorrhage occurred. A spontaneous peritoneal hæmorrhage, with the features of an acute abdominal affection, was recognized and it was suggested that such a crisis might represent the primary form of the rare condition designated by the term chronic hæmorrhagic peritonitis.

Mr. Basil Kilvington submitted for diagnosis the case of a male patient, aged 63, the immediate cause of whose admission to hospital was retention of urine. Dilatation of a urethral stricture had been carried out some years before, but increasing difficulty in urination during the last four months had culminated in retention. Apart from his urinary trouble the man had been in good health until 16 months ago. There was an indefinite history of injury one month before the onset of severe pain in the right groin. The attack lasted for one night only, but recurred five weeks later. In his description of the second onset of pain the patient referred it to the right hip and said that it extended down the right thigh and leg to the sole of the foot. He had not been able to walk without assistance since that occasion and had become progressively worse until it was difficult for him to sit up. Only in very recent months had he noticed a lump in the groin and he stated that he had lost at least 12.75 kilograms in weight since the commencement of the symptoms.

A hard mass in the right iliac fossa was obvious on physical examination and, although an enlarged gland was movable, the main mass was fixed. A general fullness of the right gluteal region was noted. Passive movement of the right hip indicated that the mobility of the joint was limited in all directions. Rectal examination disclosed the presence of an enlarged prostate. A small pedunculated mass projected into the rectum. Thickening of the wall of the rectum was apparent and blood was noticed on the examining finger.

The report of the Acting Skiagraphist (Dr. K. S. Cross) was to the effect that the right femur evidenced no abnormal changes other than some general decalcification. The right side of the pelvis showed an irregular honeycombed appearance, involving the lower portion of the ilium and pubis, with marked osteo-porosis. There appeared to be no definite evidence of invasion or enlargement of the bone.

[1] Osler: "Principles and Practice of Medicine," 8th Edition, p. 607.

Mr. Alan Newton described a case in which the radiographic appearances were very similar to those in the skiagram exhibited by Mr. Kilvington. In that instance a cancerous growth in the ilium, secondary to a primary carcinoma of the prostate, gave the same worm-eaten appearance in the radiogram. However, the tumour gave rise to no swelling in the bone, as was present in Mr. Kilvington's case. In view of the possibility of hydatid disease, Mr. Newton suggested that the complement fixation test for echinococcus might be carried out.

Mr. Kilvington mentioned that he had occasionally seen remarkable prolongation of life as the result of the application of X-ray treatment to pelvic tumours. A case in point was that of a woman who was afflicted with secondary cancerous deposits in the ilium and sacrum after removal of the breast for scirrhus. X-ray treatment was instituted and five years later the patient seemed in really better condition than she had been at the time the treatment had first been applied. It seemed to him a noteworthy retardation of the growth.

Dr. H. R. Dew exhibited specimens of (*i.*) a very extensive chronic ulcer of the leg, for which amputation was necessary; (*ii.*) the dissected knee joint from the same limb; (*iii.*) microscopical sections illustrating end-arteritis and endophlebitis.

In some remarks relative to the specimens, Dr. Dew outlined the clinical history of the case. The trouble commenced in a furuncle in the mid-portion of the right leg in a man aged 64. It was of 13 months' duration. Treatment by a variety of drugs and applications had not availed to check the spread of the ulcerative process. Finally amputation was performed. In a consideration of possible ætiological factors, it was ascertained that there had been no injury, no varicose veins and no history of syphilis. Although there was an enlarged spleen no significant blood changes were detected. The blood pressure was 130 mm. Hg. and examination of the urine yielded negative results.

The vascular factor underlying the intractable ulceration was evidenced by the extreme atheroma of the popliteal artery, comprising calcareous patches and a definite small atheromatous ulcer. There was also advanced endophlebitis, with thickening of the vein and contraction of its lumen.

In the post-operative examination of the specimen an abscess cavity was discovered deep to the semi-membranosus muscle; it extended down the leg for a distance of 5 cm., contained dirty pus and exhibited necrotic wall. The abscess had evidently arisen in the popliteal glands, all the tissue of which was peptonized.

Dr. Dew stated that the presence of the abscess was not apparent clinically, owing to its quiescent state and the accompanying flexion of the knee. The specimen illustrated the wisdom of performing amputation for such a condition well above the site of the disease process. The muscles of the limb generally were in a condition of chronic myositis, fibrosis and atrophy.

In the discussion of the dissected knee-joint Dr. Dew drew attention to the shortening and thickening of all the posterior ligaments of the knee-joint, the tendency to backward dislocation of the tibia, the lack of cartilage change, the soft state of the bones and the impossibility, even at that stage, of straightening the joint. The futility of dividing the hamstrings and popliteal fascia as measures directed towards overcoming the flexion of the joint was apparent, as was the wisdom of keeping these patients on a splint from the outset. When contracture and flexion were established no doubt continuous extension would correct them in time, but it was a matter of months. The most efficient method of reducing the deformity was by the use of Turner's splint, with anterior ratchet attachment.

It has been announced that Rear Admiral E. R. Stitt has been nominated for the position of Surgeon-General of the United States Navy, to succeed Rear Admiral W. C. Braisted, who is about to retire. Dr. Stitt is well known for his work on tropical diseases and was for several periods Professor of Bacteriology and Pathology at the Naval Medical School, Washington.

THE HEALTH OF WESTERN AUSTRALIA.

The Commissioner of Public Health in Western Australia, Dr. Everitt Atkinson, has issued his report for the years 1918 and 1919. The departments under his control are the Medical, the Health, the Factories and the Early Closing Departments.

Expenditure and Revenue.

The cost of the Medical Department amounted to £133,192 for the year 1918 and £150,229 for 1919, as compared with £105,271 for 1917. As in previous years the greater part of this money is absorbed by grants to public and assisted hospitals, and by the maintenance of the hospitals controlled entirely by the State. The State-controlled Wooroloo Sanatorium, with its adjacent farm, cost over £25,000 during 1918 and over £28,000 in 1919. The Public Health branch expended £18,136 in 1918 and £66,904 in 1919. The expenditure in 1917 had been £14,937. The enormous increase in the figures for 1919 is explained by the fact that the epidemic of influenza was responsible for a little more than £50,000 of that sum. The total revenue, made up chiefly by hospital patients' fees, amounted to £28,121 in 1918 and £28,840 in 1919. This represents a considerable advance on the revenue for 1917, which totalled £17,124. We learn that the cost of treatment per patient per diem at the Government hospitals was 7s. 10d. during 1918 and 8s. 5d. during 1919; at the Perth Public Hospital 5s. 10d. and 7s. 3d.; and at the Fremantle Public Hospital 8s. and 9s. 9d..

Vital Statistics.

The mean population was 311,092 for 1918 and 323,503 for 1919. The population on December 31, 1919, was computed at 323,503. The birth-rate shows a decline. In 1917 it was 25.5 per 1,000 of the population (not *per centum*, as is repeatedly mis-stated in the report), while in the two years under consideration it fell to 22.8 and 21.4 respectively. The death-rate per 1,000 increased from 9.0 during 1917 and 1918 to 11.1 during 1919. The natural increase has thus declined from 16.5 during 1917 to 13.7 during 1918 and 10.3 during 1919. These figures are disquieting, but it should be remembered that the influenza epidemic was responsible for the unsatisfactory rise in the death-rate during 1919. A satisfactory feature of the report is that, while in 1917 the infantile mortality was the highest in the Commonwealth (57.09 per 1,000), it was the third lowest in 1918 (57.3) and the lowest (61.3) in 1919. The absolute increase in these figures is attributed to the influenza epidemic. For comparison, it may be stated that the infantile mortality for New South Wales was 56.93 in 1917, 59.02 in 1918 and 72.19 in 1919.

Infective Diseases.

Enteric Fever.

While 260 cases of enteric fever were notified in 1917, 255 were notified in 1918 and 237 in 1919. The case mortality fell from 11.5% in 1917 to 8.2% in 1918 and 7.5% in 1919. Dr. Atkinson quotes the success of anti-typhoid inoculation in the armies during the recent war and pleads for the regular inoculation of young men and women who have not had the disease and who live in districts where it is rife.

Dysentery.

Amœbic dysentery and bacillary dysentery are now notifiable diseases in Western Australia. One case of amœbic dysentery was reported during the period covered by the report. The patient had never been outside the State, but Dr. Atkinson is satisfied of the correctness of the diagnosis. Several cases of the bacillary form occurred among the patients of the Claremont Asylum for Old Men.

Diarrhœa and Enteritis.

In his report for 1917 the Commissioner noted with satisfaction a reduction in the number of deaths from diarrhœa and enteritis in children under two years of age. The number fell to 97 in that year from 169 in 1916. He was inclined to the belief that this improvement was attributable to the water carried system of sewage. We pointed out at the time that the evidence in favour of this explanation was inadequate. The figures rose to 120 in 1918 and 122 in 1919. Dr. Atkinson now admits that the ætiology of the disease is imperfectly understood. He states, however, that among families of good education and position there is practically no mortality from the complaint. Dr Atkinson would be in a stronger position if he supplied figures to support this statement.

Diphtheria.

In 1917 there were 800 notifications of diphtheria. In 1918 an epidemic of this disease invaded the west and the number advanced to 1,277, but fell again in 1919 to 971. In spite of the increase in the number of cases, the deaths were 26 in 1918 and 32 in 1919, as compared with 31 in 1917. The case mortality was thus 2.02 in 1918 and 3.29 in 1919, as against 3.29 in 1917. The Commissioner maintains that with a well-educated public and a well-organized medical service, the death-rate from diphtheria, which causes approximately 1% of all deaths, should be almost nil. As the education of the public in matters of health and the organization of the medical service in regard to infective diseases are the responsibilities of the Commissioner, he would seem to throw the burden of combating this disease on to his own shoulders. He does not tell us of any means adopted, whether by pamphlet or newspaper, to educate the public in the seriousness of epidemic "sore throats." We believe that much might be done in this regard, just as we believe that much good has resulted from the writing of temperately-worded pamphlets on the subject of venereal infections.

Beri-Beri.

Beri-beri is still a notifiable disease in Western Australia, although few adhere to the infective theory of its origin. The incidence of the disease is much less than formerly, only 53 cases in 1918 and 32 in 1919 being notified, as compared with 218 in 1917. The case mortality is high, reaching 13.2% and 15.6% respectively in the two years under review.

Malaria.

Eight cases of malaria were notified in 1918. The number rose to the enormous figure of 686 in 1919, but 680 of these represented soldiers returned to the State from other countries. Only one case of malaria originated in the non-tropical part of the State.

Dengue.

An epidemic of dengue fever took place in the north-western area of Western Australia during 1919. Most of the cases occurred at Wyndham (229) and several at Broome (34). Two hundred and seventy-one cases were notified in all. The report does not record any deaths from the disease. No investigations into the origin of the epidemic were carried out.

Tuberculosis.

Tuberculosis is divided in the report into (1) phthisis and (2) "other T.B.," a bad and inelegant designation. In 1918 and 1919 the number of notifications of phthisis (pulmonary tuberculosis) were 432 and 467 respectively. The number of deaths from this cause were 245 in 1918 and 289 in 1919. In Western Australia eight of every hundred deaths are attributable to tuberculosis of the lungs. Tuberculosis of other organs caused 28 deaths during 1918 and 24 during 1919. Dr. Atkinson is of opinion that "the influenza epidemic gave the *coup de grâce* to a number of cases who would otherwise have survived a little longer." Similar opinions have been expressed in other States. The Western Australian figures, however, do not seem to support this view with any material evidence. During the year 1918 the death-rate from pulmonary tuberculosis rose from 0.7 (the death-rate in 1917) to 0.787 per 1,000 of the population. The percentage of the total deaths rose from 7.84 to 8.65. In 1919 the deaths per 1,000 of the population were 0.896 and the percentage of total deaths 8.05. The increase in the mortality may be due, as Dr. Atkinson does not fail to point out, to the economic stringency and increased poverty which have followed in the wake of the war.

The Wooroloo Sanatorium is under the charge of Dr. R. M. Mitchell, the Chief Resident Medical Officer. During 1918, 563 patients were treated in the Sanatorium and there were 140 deaths. During 1919 601 patients were treated and there were 122 deaths. It is significant that 37 of the patients who died during either year, were miners. Dr. Mitchell points out in a vigorously written report that with the advance of the mining industry in Western Australia, miners are entering the Sanatorium in greater numbers and at a more advanced age than formerly. During 1918 95

patients over 50 years of age were under treatment and during 1919 the number increased to 129. The majority of the miners in the Sanatorium are admitted while in the third stage of the disease when, to use the Chief Medical Officer's words: "They have contracted successively fibrotic mischief, superimposed tuberculosis and bankruptcy in reserved strength." He charges many of the miners with refusing to abandon their occupation when warned in a curable stage of the danger which threatens their health. An investigation on the lines of the Broken Hill Commission of Inquiry would do much to solve the problem of early diagnosis and evacuation of the affected miners.

As in past years, Dr. Mitchell deplores the want of improvement in the class of patient sent to the Sanatorium. Patients with advanced phthisis are all too plentiful and there is a comparative dearth of those in the early stages of the disease. Perhaps the medical profession is somewhat at fault in failing to diagnose the disease sufficiently early, but, as we pointed out in these columns a few years ago, there is an obvious disadvantage in bringing persons in danger of death into close proximity with those whose affection is curable. If the Sanatorium were reserved for patients in a curable stage and a separate home instituted for those with advanced tuberculosis, much would be done towards dissipating the prejudice against sanatoria. Under existing arrangements many a patient who enters a sanatorium, does so in a state of mental dejection, which is further aggravated by the deaths which take place around him.

Dr. Mitchell pays a tribute to the assistance given by visiting nurses in persuading persons to seek treatment while the disease is still curable. The zeal, tempered by the necessary tact and delicacy, which these nurses display in their work among the patients and contacts in the patients' own homes, is commended in very warm phrases. The Wooroloo Farm is attached to the Sanatorium and here the patients with non-active tuberculosis have an opportunity of turning their attention to dairying, pig-raising or gardening.

Influenza.

Over six pages of the report and several appendices are occupied with a description and discussion of the epidemic of virulent influenza which spread to Australia from other countries and wrought no small measure of damage to life and health in Western Australia. It will be remembered that New Zealand was suddenly overwhelmed with the disease during the months of November and December, 1918. By a strict quarantine, associated with the minimum of personal discomfort and dislocation of trade, the Federal Director of Quarantine succeeded in delaying the entry of the disease into Australia until some arrangements could be made successfully to cope with it. This *Journal* has dealt at length with the arrangements made from time to time. The Commonwealth Government summoned a conference of delegates from the various States to agree upon a plan of campaign in the event of an epidemic occurring within any port of Australia. Western Australia was duly represented at the conference. It was agreed, among other things, that should influenza break out in any State, the Commonwealth should take complete control of all inter-State traffic by land and sea. Local district isolation was left in the hands of the health authorities of the individual States. Dr. Atkinson states that the first notification of the disease came from Victoria, which was declared an infected State on January 28, 1919. Meanwhile trans-continental trains carrying persons from Victoria to Western Australia were considered by the health authorities of the latter State to be possible carriers of infected persons owing to the probable delay in Victoria in recognizing the character of the disease. Accordingly, it was considered justifiable to break the terms of the compact entered into with the Commonwealth and three trains, owned and controlled by the Federal Government, were, therefore, held up at a small station several miles outside Kalgoorlie. The State had made arrangements to quarantine the passengers in tents. Unfortunately, no reckoning had been made of the elements. Stormy weather struck the tents to the ground and in other ways made the existence of the passengers miserable. As necessity knows no law, the State seized the trains and converted them into a quarantine station. This incident occasioned considerable friction with the Commonwealth authorities. Dr. Atkinson seeks to justify it on the ground that it was a reasonable preventive measure against the introduction of the disease into Western Australia. But the fact remains that a compact entered into between that State and the Commonwealth was broken and Dr. Atkinson can point to no good results which might justify the breach of faith. In his attitude towards the epidemic he showed the same ability and enthusiasm which marks all his endeavours in the cause of public health, but we are of opinion that in running counter to the Commonwealth authorities he was taking a grave and hardly warrantable authority upon himself. By the compact with the Commonwealth and responsibility of inter-State quarantine was definitely lifted from Dr. Atkinson and placed on the shoulders of Dr. Cumpston. Interference by Dr. Atkinson might have been considered by Dr. Cumpston sufficient warranty to disclaim any further responsibility for quarantine as far as Western Australia was concerned. Unity of responsibility is as essential in dealing with an epidemic as in waging war. Luckily no untoward effects resulted from this division of counsellors, but we are not satisfied that it was productive of any good.

Another regrettable disagreement with the Commonwealth concerned the period of quarantine to be undergone by those persons who travelled by sea. The State health authorities were of opinion that the period of quarantine demanded by the Federal Director was inadequate, and they demanded that sea passengers complete seven clear days before being allowed to land. Here, again, was a definite trespass on the preserves of the Commonwealth. It led to conflict of action, duality of control and very considerable expense and no evidence is adduced in the report to show that the added period rendered the quarantine more sure or efficient.

The first definite case of influenza with pulmonary involvement was reported from Gwalia on May 30, 1919. The disease spread rapidly and cases were soon reported from Leonora. These two towns were placed in quarantine, Leonora being released on July 17, but in the meantime (June 6) the disease broke out in Perth and at the end of a week 41 cases had been reported in that city. The metropolitan area was at once put under a strict quarantine and it was not till July 14 that cases were reported from other areas. On that date the disease was proclaimed from Kalgoorlie and Boulder and it soon spread over the entire State, reaching Bunbury on August 11, Geraldton on August 19, Mount Barker on October 23 and Broome (the last town to be attacked) on November 25. At first infected houses were quarantined and patrolled, but this procedure was soon found impracticable and a placard showing that the dwelling was isolated, was posted on the gate. Overcrowding of trains and trams was prohibited. Picture-shows were not closed, as few persons patronized places of entertainment during the epidemic. Many pamphlets describing the prophylaxis and treatment of the disease were issued. In the metropolitan area the patients were treated at the Rotunda Private Hospital (40 beds), the Blackboy Military Hospital (342 beds) and later at the public hospitals of Perth and Fremantle. In all, 2,441 persons were treated in metropolitan hospitals, of whom 181 died, making a mortality of 7.4%. As regards the features of the disease, Dr. Atkinson notes the marked frequency of lung involvement, the suddenness of onset, the slow pulse in relation to the high temperature, the presence of tracheitis and bronchitis and the tendency to blood-stained expectoration. As noted by other observers, he mentions the frequency of crepitations audible at the bases of the lung and especially at the base of the left lung. The curious, lilac, cyanotic tint of the body described elsewhere was not common in the epidemic in Western Australia. Epistaxis was very common, especially in children. Pregnant women suffered badly, abortion, premature labour or death being the rule. The outlook was bad in patients suffering from syphilis or chronic alcoholism. The curious observation is recorded that moderate drinkers appeared to have some immunity to the disease. The incubation period is considered to be no longer than three days. Of complications, empyema was more common in the later stage of the epidemic. Myocarditis is considered to have been the most frequently and severe complication. Pleurisy (probably pleurisy with effusion is meant) was rare. The disease was more common among

males than females. Twice as many males died as females. The greatest number of deaths occurred in males between the ages of 30 and 35 years, and in females between the ages of 25 and 30 and over 50. Inoculation was carried out on an extensive scale, 94,480 persons being inoculated at the public expense. The Commissioner speaks guardedly of the value of this prophylactic measure. He is of opinion, however, that it confers some immunity against the more serious complications of the disease.

No organized effort was made to elucidate the bacteriological problems of the epidemic. Specimens taken from seventy infected persons were examined, these specimens being throat swabbings or sputum from which cultures were made. Gram-positive diplococci (and particularly pneumococci) were the most constant organisms found. Streptococci were not infrequent. *B. influenzæ* was present in one third of the specimens. It was observed that several specimens taken from patients with severe forms of the disease yielded pure cultures of this organism and that the persons almost invariably died. The observations, however, extended over so small a number of cases that no definite conclusions can be drawn.

The total expenditure of preventing and treating the disease amounted to £60,142, of which over £30,000 were spent in the equipment and maintenance of the metropolitan hospitals.

Venereal Diseases.

The *Venereal Diseases Act* was amended in 1918 to give the Commissioner power to take action in regard to any person whom he believed to be suffering from a venereal infection. Previously, the Commissioner could not order the medical examination of any person unless a written statement by an informer that the person was believed to be suffering from a venereal disease was in the Commissioner's hands. The new measure was only to operate for a period of 15 months (June 6, 1918, to September 30, 1919), but at the end of that time a further period of 15 months was granted. Dr. Atkinson uses his power with much circumspection and wisely refrains from action in the absence of definite evidence. The number of new cases of venereal disease in 1917 was 1,316. During 1918 and 1919 the numbers were 998 and 1,038 respectively. Of these figures for the three years 1,065, 836 and 892 represent male members of the community, so that the proportion of males to females was 4.2 to 1, 5.1 to 1 and 6.1 to 1 for the three respective annual periods. Gonorrhœa is a much more frequent disease than syphilis, which is showing a definite tendency to decrease. In 1917, for every one case of syphilis, 3.4 cases of gonorrhœa were notified. In 1918 the proportion of gonorrhœa to syphilis was 4.7 to 1 and in 1919 5.1 to 1. Gonorrhœa is proportionately a much more frequent disease in males, for whereas for the three years the proportion of cases of gonorrhœa to cases of syphilis (not *vice versa*, as is stated in the report) was, in the female, 1.6 to 1 in 1917, 2 to 1 in 1918 and 2 to 1 in 1919, the cases in males bore the relations of 4.2 to 1, 6 to 1 and 6.2 to 1 respectively. Of 159 cases of syphilis notified during the year 1919, 43 were in the primary stage of the disease, 47 in the secondary stage and 61 in the tertiary stage, while eight were cases of congenital syphilis.

Medical Inspection of School Children.

In a report to the Commissioner Dr. Roberta H. M. Jull, the medical officer for schools, states that during 1918 12 schools were visited and 4,223 children examined. The influenza epidemic retarded this valuable work during 1919, when only 9 schools were visited and 2,928 children examined. Dr. Jull notes with satisfaction that the attendances at school increase during the visit of the medical officer. This is interpreted to mean that parents value the medical examinations and appreciate the work done. It is noted, however, that parents do not satisfactorily carry out the recommendations in regard to treatment. Of 100 children specially mentioned only 28 had had all remediable defects treated, 32 had received partial treatment and 40 had received no treatment. During the year 1918 treatment was attempted in 42.6% of the cases recommended for treatment and in 1919 only 34.3%. Dr. Jull makes interesting mention of the prevalence of pediculosis amongst school children. In 1918 16% and in 1919 22.2% suffered from this condition. By means of lecturettes to parents and persuasion by a visiting nurse an effort was made to reduce the incidence of this affection. A clause in the *Health Act Amendment Act, 1918*, gives power to a medical officer of health to direct parents or guardians to clean and maintain clean the verminous heads of children under pain of prosecution. No prosecutions were found necessary, a warning being quite sufficient to bring about immediate treatment. As in other States, defective conditions of the teeth continue to reach a very unsatisfactory figure; 83.8% of the children examined had at least one carious tooth, 36.7% had four or more, while one child aged six years had 16 carious teeth out of 20. Debilitated children are classified under the heading "anæmia" and "poor general health"; 6% were thus classified in 1918 and 7% in 1919. It is observed that the majority of these belong to families living in congested areas and containing six or more children of tender age. Dr. Jull believes that the demolition of slum areas and a basic wage allowance for each child beyond the three assumed to represent an average family would go far towards improving the general health of school-children.

A considerable portion of the report is occupied with the subject of mental defectiveness. The School Medical Officer adopted a simple means of estimating the number of young "morons" in the schools. Adopting the view that the teacher is a good judge as to a child's intelligence and tends to under-estimate rather than over-estimate a pupil's mental defectiveness, she accepted the classification of the teachers. The diagnosis of subnormal mentality was questioned in one case only, that of a child who was almost totally deaf. Under this scheme 1% of school children were classified as defectives in 1918 and 1.6% in 1919. We are informed that when an opportunity occurred to interview the parents of some of these children, one or both generally showed evidence of feeble-mindedness. Dr. Jull pleads for special teaching of these inefficients and for segregation in order to prevent reproduction of the type. The first suggestion is well within the limits of practical pedagogy; the latter is a problem bristling with difficulties. Besides these definitely defective children, there is a further group which includes children who are slow to learn and whose intelligence is slightly below the average. No less than 11.4% were classified under this heading in 1918 and 16.2% in 1919.

Of the 4,223 children examined during 1918 and the 2,828 during 1919, 174 and 155 respectively showed varying degrees of deafness; 714 and 446 had adenoids; 1,644 and 1,030 enlarged tonsils; 158 and 149 suffered from hypermetropia and 149 and 107 from myopia; 81 and 67 had anæmia; 44 and 46 had the very indefinite condition "weak first sound"; 22 and 70 "accentuated second sound"; 63 and 88 had hernia of various kinds; and 185 and 132 suffered from "poor general health." These were numerically the most serious conditions present.

Bacteriological Work.

The bacteriologist in the laboratories was kept busy during the two years. By far the most important part of the work numerically was the examination of throat-cultures for the Klebs-Löffler bacillus. The *B. diphtheriæ* was found in about 20% of the cultures examined. The *B. tuberculosis* was found in about the same proportion of the specimens of sputum.

Visiting Nurses and Registration of Midwives.

The department employs two visiting nurses at Perth and one at Kalgoorlie. The duties of these ladies are mainly twofold: (1) The visiting of the homes of tuberculous patients to give advice as to the treatment of contacts, disposal of sputum, sleeping-out, etc.; and (2) the supervision of midwifery as practised by registered midwives and the inspection of maternity hospitals. In Western Australia none other than a trained midwife can be registered—this has been in force since June, 1913—and thus the number of untrained midwifery nurses is gradually diminishing.

Factories and Early Closing.

The Chief Inspector of Factories addresses his report to the Commissioner of Public Health, but, as we pointed out in dealing with the report for 1917, factory hygiene in its true sense is non-existent. The majority of the defects noted in the various factories were such as could be best dealt with by a medical man. There were 14 cases of improper disposal of fumes and dust during the two years, 109 cases of defective and unclean sanitary conveniences, 17 cases of defective drainage and seven cases of insufficient lighting and ventilation.

The section dealing with the *Early Closing Act* does not call for special comment.

Correspondence.

PARANOIA AND OCCULTISM.

Sir: In your issue of January 8, 1921, there is a letter from a correspondent under the heading of "Paranoia and Occultism," apparently taking exception to your recommendation to warn suggestible patients against "these pernicious doctrines."

The majority of those who have been long in practice would, I think, cordially endorse that advice, applied to lectures or discussions upon spiritualism or to *séances*. Many of the older practitioners can call to mind regrettable instances which go to show that to many suggestible persons such doctrines are really "pernicious." In this connexion, and in the interests of truth, an examination should be made of the paranoiacs admitted to asylums in Australia during the last two months—and of those who will be admitted during the next six months. A comparison of these with the number admitted prior to the war, and during the war, with an examination of their delusions, might throw some light upon the effects of such amiable doctrines as those under discussion. (I hesitate to use the word "pernicious.")

Your correspondent asks: "Why should we not approach any new idea without intense bias and apparent hatred?"

In doing so he appears to forget that spiritualism to the older men in the profession is not "a new idea," whatever truth there may or may not be in it. So far as one can judge from Sir Conan Doyle's public utterances, he did not give us anything really new, nor did he give us anything more convincing than his predecessors.

Your leader seems to suggest in the latter part of its first paragraph that we might expect a greater readiness to accept (or fall a victim to) occult doctrines since the war, with all its nervous tension, than before it. It is certain that some public utterances on these subjects during our last Medical Congress were received with a tolerance that they would scarcely, in my opinion, have received before the war. I listened to one conversation on occultism between certain great physicians of this country till I began to wonder whether I had taken leave of my senses, or whether they had! Most of them had been engaged in war work abroad, bless them!

I noticed in a farewell speech of Sir Conan Doyle's that he appeared to be trying to convey to his audience that his well-filled halls were an indication that there had been a great increase in the number of his adherents. He probably overestimated that, but, if not, it remains to be proved whether the world will derive advantage from it or not.

Yours, etc.,

"SENEX."

February 6, 1921.

REMOVAL OF ADENOIDS IN INFANCY.

Sir: Reading the article in the *Journal* of January 29, 1921, on "Removal of Adenoids in Infancy," leads me to make a few comments on this evergreen subject.

Briefly, I am of opinion that these post-nasal adenoids should almost invariably be removed when their presence is recognized, the onset and progress of symptoms being often so insidious that more or less permanent damage is done before the necessity for the operation is recognized or admitted.

I cannot see that the time of infancy is a contraindication; in fact, it is at that time all the more advisable to remove these hypertrophies. The very fact that the attention of a medical man is drawn to their actual presence, is of itself an indication that something is at fault which has turned his attention to their presence.

But, although a minor operation, it should be carried out with care, and I cannot approve of the vigorous scraping with finger tip or nail after using the curette, for I am sure that, apart from direct sepsis, this is a cause of middle ear trouble by forcing blood, etc., into the orifice of the Eustachian tube. In very young infants one sweep of a small post-nasal curette should be sufficient; in older children I prefer the La Force adenotome, which makes a clean cut, followed by one sweep on each side of the central cut with a small size ordinary curette, examining subsequently with the finger and carefully detaching fragments.

As an illustration of the operation in very young infants I might mention a case which occurred at the London Hospital: An infant was just four weeks old and had pronounced snuffles; the history did not altogether exclude syphilis. I asked Dr. Hunter Todd for his opinion *re* adenoids. He advised making one sweep with a small post-nasal curette, which was done, a small mass of adenoid tissue being removed. This was done without any anæsthetic and I doubt not that the little patient suffered much less than would have been the case with any anæsthetic. In this particular case the benefit from the small operation was pronounced.

For older infants a whiff of ethyl chloride or C. and E. can be given.

With regard to tonsils I am not of so decided an opinion. I have so frequently seen more or less mutilation of the faucial pillars, even by the most competent operators, as to make me hesitate to remove them in the minor cases of tonsillar hypertrophy, unless there is special indication for doing so in addition to the mere hypertrophy. I do not agree with the dictum that, when removing adenoids, one "might as well remove the tonsils at the same time."

But in the case of adenoids, with regard to the question of their possible recurrence, this seems to me to be no greater a reason for not removing them than is the possibility of recurring constipation a contraindication for the use of an aperient.

Yours, etc.,

ERNEST CULPIN.

Wickham Terrace, Brisbane,
February 2, 1921.

It is with regret that we have to announce the death of Dr. John Sprod, of Kensington, South Australia.

Books Received.

GOUT, by Llewellyn Jones Llewellyn, M.B., with a Section on Ocular Disease in the Gouty, by W. M. Beaumont; 1920. London: William Heinemann (Medical Books), Limited; Royal 8vo., pp. 468, one coloured plate. Price, 30s. net.

DISEASES OF THE THROAT, NOSE AND EAR, by Dan McKenzie, M.D., F.R.C.S.E.; 1920. London: William Heinemann (Medical Books), Limited; Royal 8vo., pp. 646, with two coloured plates and 199 figures in the text. Price, 42s. net.

PRACTICAL AUSTRALIAN SANITATION; VOLUME I., PUBLIC HEALTH, SANITARY LAW, INFECTION AND DISINFECTION, INSPECTION OF PREMISES AND OF FOOD, by the late C. J. S. Willis, with Introductory Chapter by J. L. Bruce, M.R.S.I., edited by J. S. Purdy, D.S.O., M.D., C.M., F.P.H., D.R.S.; 1920. Sydney: William Brooks & Company, Limited; Crown 8vo., pp. 288, illustrated by 28 figures. Price, 25s.

THE SEX-COMPLEX: A STUDY OF THE RELATIONSHIPS OF THE INTERNAL SECRETIONS TO THE FEMALE CHARACTERISTICS AND FUNCTIONS IN HEALTH AND DISEASE, by W. Blair Bell, B.S., M.D.; Section Edition, 1920. London: Baillière, Tindall & Cox; Royal 8vo., pp. 251, with 61 illustrations. Price, 21s. net.

SOME EXPERIENCES OF A NEW GUINEA RESIDENT MAGISTRATE, by Captain C. A. W. Monckton, F.R.G.S., F.Z.S., F.R.A.I., some time Official Member of Executive and Legislative Council, Resident Magistrate and Warden for Goldfields, High Sheriff and High Bailiff, and Senior Officer of Armed Constabulary for H.M.'s Possession of New Guinea; 1920. London: John Lane; New York: John Lane Company; Sydney: Angus & Robertson, Limited; Demy 8vo., pp. 337, with 37 illustrations and a map. Price, £1 1s. net.

PYORRHŒA ALVEOLARIS IN ITS CLINICAL ASPECT, by D. A. Crow, M.B., Ch.B., with Foreword by Sir Frank Colyer, F.R.C.S., L.D.S.; 1921. London: Baillière, Tindall & Cox; Crown 8vo., pp. 111. Price, 6s. net.

SYPHILIS AND ITS TREATMENT, WITH ESPECIAL REFERENCE TO SYPHILIS OF THE SKIN, by Wilfrid S. Fox, M.A., M.D., B.C., M.R.C.P.; 1920. London: H. K. Lewis & Company, Limited; Royal 8vo., pp. 195, with 53 illustrations, including 14 coloured plates. Price, 36s. net.

A GUIDE TO ANATOMY, FOR STUDENTS OF MEDICAL GYMNASTICS, MASSAGE AND MEDICAL ELECTRICITY, by E. D. Ewart; 1920. London: H. K. Lewis & Company, Limited; Demy 8vo., pp. 301, with 94 illustrations, including 35 plates. Price, 16s. net.

EDWARD HILL, M.D., Regius Professor of Medicine in the University of Dublin: A Chapter in the History of the Royal College of Physicians of Ireland, by T. Percy C. Kirkpatrick, M.D., M.R.I.A.; submitted to the Royal College of Physicians of Ireland with the Annual Report of Sir Patrick Dun's Library; 1920. Dublin: The University Press; Demy 8vo., pp. 37.

A SHORT PRACTICE OF MIDWIFERY: Embodying the Treatment Adopted in the Rotunda Hospital, Dublin, by Henry Jellett, B.A., M.D., F.R.C.P.I.; Eighth Edition, Revised; 1921. London: J. and A. Churchill; Crown 8vo., pp. 548, with four coloured plates and 236 illustrations and an appendix containing the statistics of the Hospital for the last thirty years. Price, 21s.

DISEASES OF THE SKIN: A Text-Book for Students and Practitioners, by J. M. H. Macleod, M.A., M.D., F.R.C.P.; 1920. London: H. K. Lewis & Co., Ltd.; Royal 8vo., pp. 1,307, with 23 illustrations in colour and 436 in black and white. Price, £3 10s.

Medical Appointments.

An announcement is published in the *Victoria Government Gazette* to the effect that the surgeries of Dr. E. R. Cordner (B.M.A.), of Diamond Creek, of Dr. E. Kelmar (B.M.A.), of Dookie, of Dr. N. A. Albiston (B.M.A.), of Cox Street, Port Fairy, of Dr. K. McK. Doig (B.M.A.), of Manifold Street, Colac, and of Dr. E. Spargo (B.M.A.), of Merbein, Victoria, have been appointed "places for public vaccination."

Dr. J. L. O'Flynn (B.M.A.) has been appointed District Medical Officer and Public Vaccinator at Ravensthorpe, Western Australia.

The appointment is announced of Dr. Theodore Hodge (B.M.A.) and Dr. Godwin (B.M.A.) as District Medical Officers and Public Vaccinators at Derby, Western Australia.

During the absence of Dr. Mackie (B.M.A.) Dr. Bertram Cohen (B.M.A.) has been appointed Acting Medical Officer to the Narrogin Municipal Council, Western Australia.

It is announced that Dr. J. H. Bennett (B.M.A.) has been appointed Public Vaccinator at Hawthorn and Dr. C. E. Watson (B.M.A.) at Bunyip, Victoria.

The appointment is announced of Dr. Minton Connell (B.M.A.) as Medical Officer of Health to the Leonora-Malcolm Road Board, and of Dr. H. Ward (B.M.A.) to the Meckering Local Board of Health, Western Australia.

During the absence of Dr. W. E. Jones (B.M.A.), Dr. Clarence G. Godfrey (B.M.A.) has been appointed Acting Inspector of Inebriate Institutions in Victoria.

Dr. K. F. Vickery (B.M.A.) has been appointed for a period of six months on probation Junior Assistant Microbiologist to the Department of Public Health of New South Wales.

Dr. Cyril Shepherd (B.M.A.) has been appointed Honorary Ophthalmic Surgeon to the Lady Edeline Hospital for Babies at Vaucluse, New South Wales.

The appointment for a period of twelve months on probation of Dr. G. G. Nicholls (B.M.A.) and Dr. Clive T. Stephen as Junior Medical Officers to Hospitals for the Insane in Victoria, is announced in the *Victoria Government Gazette* of January 28, 1921.

Dr. Colin Macdonald (B.M.A.), of Warracknabeal, has been appointed Health Officer for the Shire of Borung, Victoria.

Medical Appointments Vacant, etc.

For announcements of medical appointments vacant, assistants, locum tenentes sought, etc., see "Advertiser," page xxiii.

Croydon District Hospital, North Queensland: Medical Officer.

Pelaw Main, Richmond Main and Stanford Merthyr Collieries, New South Wales: Medical Officer.

Medical Appointments.

IMPORTANT NOTICE.

Medical practitioners are requested not to apply for any appointment referred to in the following table, without having first communicated with the Honorary Secretary of the Branch named in the first column, or with the Medical Secretary of the British Medical Association, 429 Strand, London, W.C..

Branch.	APPOINTMENTS.
NEW SOUTH WALES. (Hon. Sec., 30-34 Elizabeth Street, Sydney.)	Australian Natives' Association. Ashfield and District Friendly Societies' Dispensary. Balmain United Friendly Societies' Dispensary. Friendly Society Lodges at Casino. Leichhardt and Petersham Dispensary. Manchester Unity Oddfellows' Medical Institute, Elizabeth Street, Sydney. Marrickville United Friendly Societies' Dispensary. North Sydney United Friendly Societies. People's Prudential Benefit Society. Phœnix Mutual Provident Society.
VICTORIA. (Hon Sec., Medical Society Hall, East Melbourne.)	All Institutes or Medical Dispensaries. Manchester Unity Independent Order of Oddfellows. Ancient Order of Foresters. Hibernian Australian Catholic Benefit Society. Grand United Order of Free Gardeners. Sons of Temperance. Order of St. Andrew. Australian Prudential Association Proprietary, Limited. Mutual National Provident Club. National Provident Association.
QUEENSLAND. (Hon. Sec., B.M.A. Building, Adelaide Street, Brisbane.)	Australian Natives' Association. Brisbane United Friendly Society Institute. Stannary Hills Hospital.
SOUTH AUSTRALIA. (Hon. Sec., 3 North Terrace, Adelaide.)	Contract Practice Appointments at Renmark. Contract Practice Appointments in South Australia.
WESTERN AUSTRALIA. (Hon. Sec., 6 Bank of New South Wales Chambers, St. George's Terrace, Perth.	All Contract Practice Appointments in Western Australia.
NEW ZEALAND: WELLINGTON DIVISION. (Hon. Sec., Wellington.)	Friendly Society Lodges, Wellington, New Zealand.

Diary for the Month.

Feb. 15.—N.S.W. Branch, B.M.A., Executive and Finance Committee.
Feb. 15.—Illawarra Suburbs Med. Assoc. (N.S.W.), St. George District Hospital.
Feb. 18.—Eastern Suburbs Med. Assoc., Annual (N.S.W.).
Feb. 22.—N.S.W. Branch, B.M.A., Medical Politics Committee; Organization and Science Committee.
Feb. 23.—Vic. Branch, B.M.A., Council.
Feb. 24.—S. Aust. Branch, B.M.A.,
Feb. 25.—Q. Branch, B.M.A., Council.
Feb. 25.—Central Southern Med. Assoc. (N.S.W.) Annual Meeting, Goulburn.
Feb. 25.—Q. Branch, B.M.A., Council.
Mar. 1.—N.S.W. Branch, B.M.A., Ethics Committee; Executive and Finance Committee.
Mar. 2.—Vic. Branch, B.M.A..

EDITORIAL NOTICES.

Manuscripts forwarded to the office of this journal cannot under any circumstances be returned.

Original articles forwarded for publication are understood to be offered to *The Medical Journal of Australia* alone, unless the contrary be stated.

All communications should be addressed to "The Editor," *The Medical Journal of Australia*, B.M.A. Building, 30-34 Elizabeth Street, Sydney. (Telephone: B. 4635.)